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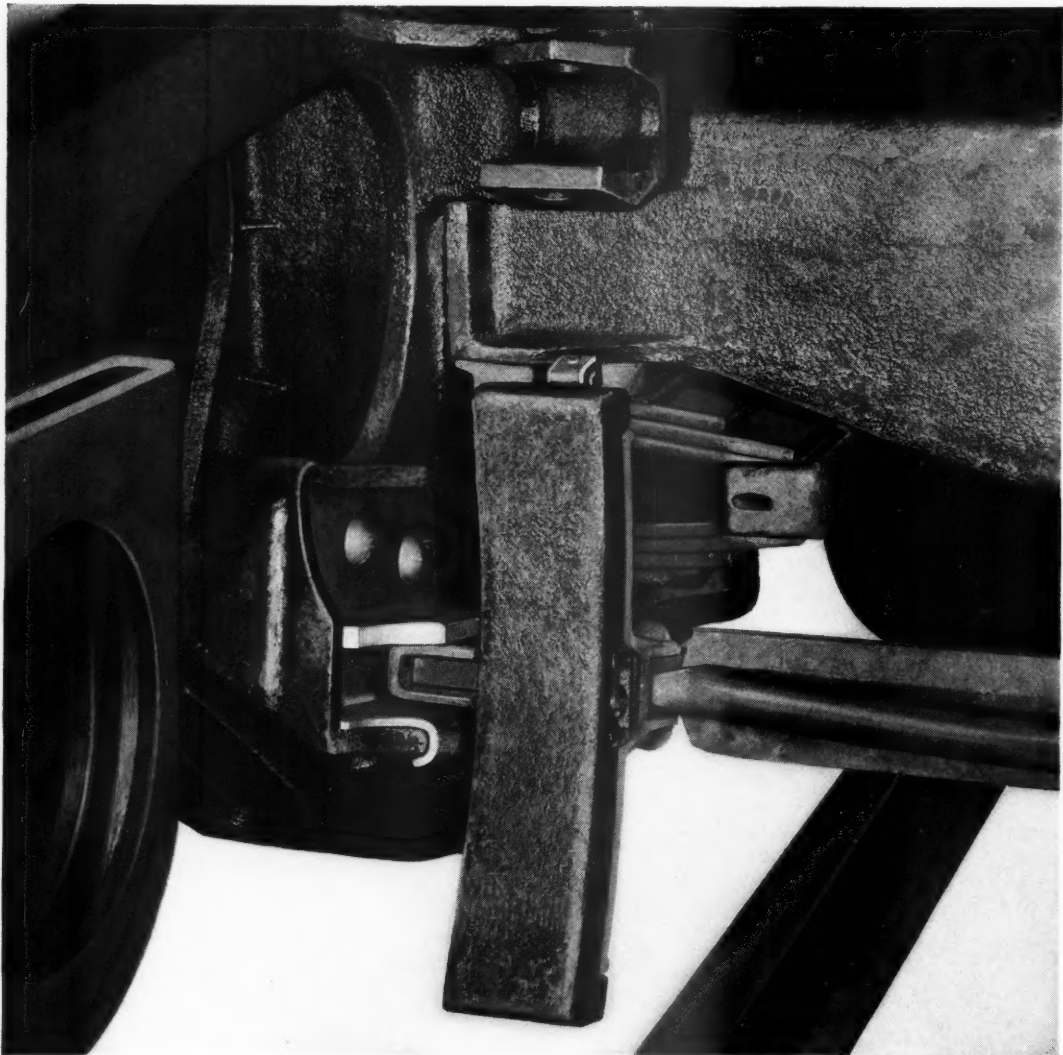
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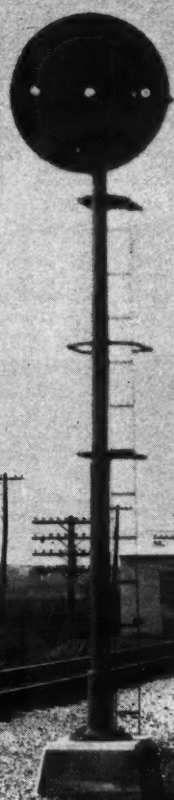
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# The Week at a Glance

**WISDOM IN TRUCK RATES:** The New England truck operators—many of whom have experience back into the old “hayburner” days—have taken a stand in favor of truck rates based on truck costs and truck characteristics. In this stand they are challenged by other truck operators who want truck rates based on railroad rates—to enable them to continue to “pick and choose” their traffic. The “traffic box” on the editorial pages herein wants to know who is likely to know more about the principles which need to be observed by a business in order to stay in business—people with generations of experience at staying in business or newcomers with a “boomer” psychology.

**DUTY TO EMPLOYEES:** President Clement of the P. R. R. in his recent address before the Pittsburgh Traffic Club mentioned, among the responsibilities of railway management, the obligation which they bear to railroad employees. The leading editorial analyzes the nature of this responsibility and concludes that, in substance, it means *the duty of management to maintain railroad employment* (which is just another way of saying: Management's duty to protect railroad traffic and revenue, because employees, automatically, get 47 per cent of all the money the railroads take in). The function of maintaining railroad traffic and earnings is the most important job which anybody can perform in behalf of railroad employees—because, obviously, nobody can make a job attractive unless the job exists first. And it is only the traffic and the earnings which can assure the existence of the job. The editorial suggests that railroad employees are less-well-informed of the economic facts affecting their welfare than, in their own interest, they should be. The question is raised as to whose duty it is to provide them with such information.

**NEW HAVEN PLAN:** A revised plan of reorganization for the New Haven has been issued by the full bench of the I. C. C.—which plan reverses Division 4's projected reorganization of this property, by providing for the inclusion of the Old Colony R. R. in the scheme; with a provision looking to the ultimate reduction of the losses the latter company now sustains in the operation of passenger lines in the Boston area. Commissioners Porter and Mahaffie dissented, the latter on the ground that the New Haven ought to be permitted to reform itself without being burdened with the Old Colony. “If,” said he, “the public insists on service that costs more than is paid for it, the deficit should be made up by a public assessment rather than by one levied against the New Haven bondholders.”

**OLD COLONY PSGR. TRAINS:** The I. C. C. has found that it has no authority to permit the Old Colony to eliminate its non-paying passenger trains. But what it does do, in requiring the New Haven to take over the Old Colony, is to provide that the revenue from Old Colony operations

be compared with its expenses and, if there isn't enough left over to pay the interest on the Old Colony securities which the New Haven will have to assume—then the New Haven “shall thereafter be under no obligation to continue passenger service on the Boston group of the Old Colony.” Thus is promulgated the interesting doctrine that the maintenance of unprofitable passenger service has a claim on the Old Colony's revenues, prior to that of the road's stockholders—who are denied all participation in the reorganization.

**BUDD ON TRAFFIC OUTLOOK:** Quite the most impressive statement which has yet appeared of probable traffic during the next couple of years, and the readiness of the carriers to meet the demands upon them, was given in Ralph Budd's address this week before the Western Society of Engineers, published herein. The transportation member of the National Defense Advisory Commission sets forth how the various traffic estimates have been calculated and, concerning railroad ability to meet the demands upon them, he concludes that “it appeals to railway men more as a promise than a threat to be told that they will have to handle about three-fourths as much traffic in 1941 as they handled in 1929.”

**OVEREXPANSION UNWISE:** The hysterical left-wing demand that the railroads get several hundred thousand more cars than they can foresee any use for receives a final answer in Mr. Budd's quiet observation that transport overexpansion is undesirable, because it would use up plant capacity and thereby weaken the defense effort in the production of goods which are really needed.

**BEST M OF W YEAR:** Not since 1931 have the railroads spent as much for maintenance of way and structures as they did in 1940—as an editorial herein reveals. Expenditures per mile averaged \$2,135 last year, as against only \$1,339 in 1933, at the bottom of the 11-year-old depression.

**FACE LIFTED:** The 72-year-old station of the Wabash at Lafayette, Ind., has been given a colonial exterior and a streamlined interior with new furnishings which have had the effect of giving Lafayette the equivalent of an all-new, modern station. How this transformation was accomplished is revealed in an illustrated article elsewhere in these pages.

**POPPET VALVE TESTS:** “O. C.” poppet valves have been in service on a Pennsylvania locomotive for more than a year—the locomotive having been subjected to extensive tests, both on the road and on the test plant at Altoona. Results observed are summarized in an illustrated article elsewhere in this issue. Considerable increases in drawbar horsepower were observed by the use of this mechanism—24 per cent at 60 m.p.h., 33 per cent at 70 m.p.h., and 44 per cent at 80 m.p.h.

**OUT OF PAWN:** The re-organized Chicago Great Western came out from under the jurisdiction of the courts last week—and an article herein sets forth the new financial and corporate set-up, with a summary of the property's vicissitudes prior to its 1935 trusteeship.

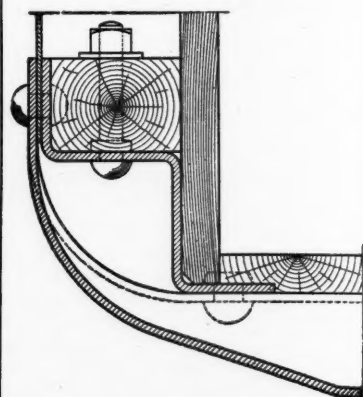
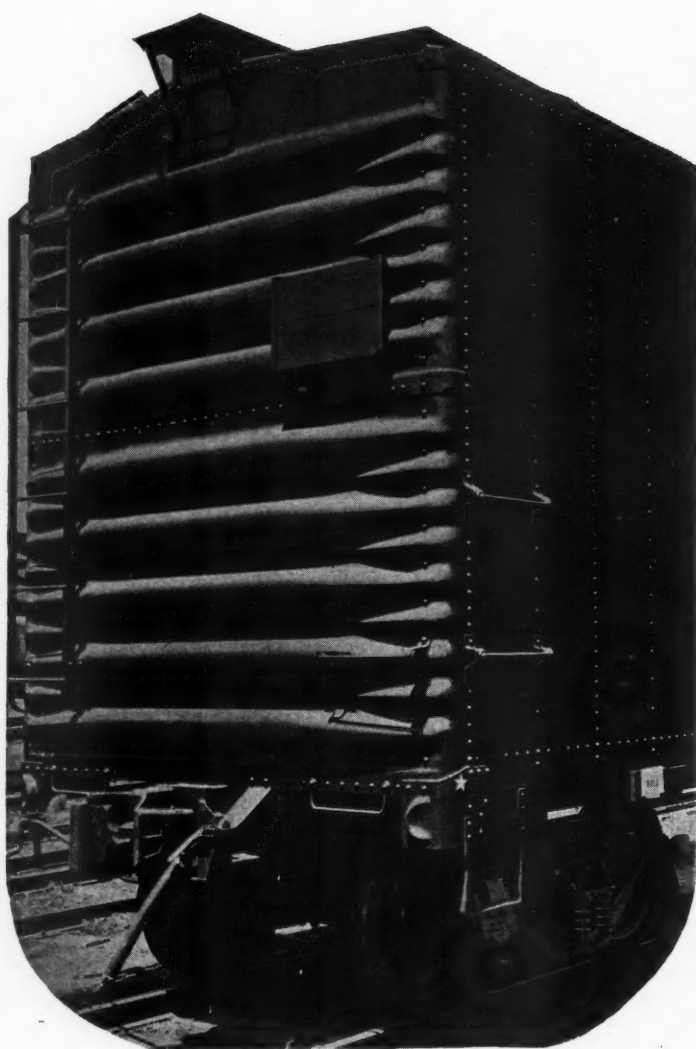
**SMILES ON RR TRUCKING:** The I. C. C.'s almost iron-clad rule, which prevented railroads from trucking freight which does not get some rail haul, has been modified, as was reported in our news pages last week. Further relief of what might have been a most serious restriction is noted in the news pages herein. Specifically, the Commission has rejected the contention of truck operators that a railroad, in arranging for rail-highway service, contract for the highway haul with established truck operators. The L. & N. has been authorized to set up its own truck lines instead of being required, as truck operators demanded, to contract with them for such trucking as it proposed to establish.

**FLEMING PHILOSOPHIZES:** Wage Administrator Philip Fleming has looked upon his handiwork in establishing 36 cent per hour as the minimum wage on Class I railroads and found it good, as is reported in the news pages herein. He doesn't think the higher minimum is going to cause the railroads to do any more mechanization than they would have done anyhow. He doesn't believe any railroads are going to have to shut up shop on account of this wage minimum who wouldn't have been forced to do so for other reasons. He thinks that the carriers are operating with so close to a minimum number of employees that they can't lay off any considerable men on account of this increase. All in all, he is of opinion that labor is going to get a slightly larger share of total revenues as a result of his activities, and other interests a slightly smaller share; and this is quite okay by him.

**HARRISON IS ANGRY AGAIN:** In a remarkable display of magisterial indignation, George Harrison has written a lengthy critical letter to the Wall Street Journal, which that paper published on February 26. Mr. Harrison was piqued that the Journal had estimated that prospective demands by labor organizations on the railroads would total 190 million dollars—which he considered to be a misrepresentation of his demand for paid vacations, which he calculates would cost only 27 millions. He suggests that before long the freedom of the press in this country will be curtailed; that a “new order” is coming in Britain; and that American employers ought to get on the job (presumably to placate the unions) before their own “house is on fire”. He doesn't think that resistance by employers to “social gains” for labor unions is consistent with the national unity required for the defense effort—which would seem to imply a view on his part that union co-operation, if it is to be secured, must be purchased.



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## RAILWAY AGE

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# The Responsibility of Management to Employees

M. W. Clement, president of the Pennsylvania, in two of his infrequent public addresses has called attention to one of the responsibilities of railway management which is little-discussed and is even scarcely recognized, unless by management itself. This is the responsibility which railway management bears to railway employees. In his recent appearance before the Pittsburgh Traffic Club, Mr. Clement suggested that this managerial responsibility is of "long-run" character, with the employees looking to the leaders of their unions to protect their more immediate interests.

How much validity is there in this opinion that management has a duty to employees, beyond that of dealing justly with them? Upon what economic or ethical principles is such a responsibility grounded? How well is management performing this obligation? Do employees have an adequate appreciation that management recognizes an obligation in their behalf; or that it is actively and conscientiously living up to this obligation?

### A Duty Well Done Merits Recognition

Correct answers to these questions should shed light on one of the most perplexing of all problems of railroad management, namely, that of securing employee co-operation in, rather than opposition to, reasonable managerial action necessary for the efficient operation of railroad properties. Because, if management has an important function to perform in behalf of employees, and if it is discharging that obligation honorably and effectively—then it should remain only for employees to be brought to a full recognition of this situation, in order greatly to improve employee-management relationships on the railroads.

Mr. Clement did not dwell at any great length upon the basis of management's responsibility to employees. It seems clear, however, that an obligation to employees is implicit in the primary obligation of management to safeguard the interest of the stockholders. That is to say, management is chosen primarily to perform the functions of the owner of a business. An owner is not concerned merely with the earnings which he secures

from his business this year or next, but also with *maintaining the integrity of his investment*. He wants the business to be in existence and still functioning profitably ten or twenty or thirty years hence. If that is not what he wants, he wouldn't invest his money in a business, but would live on his capital. If the owner or the management of a business conducts it in such a manner that its future earning power is dissipated for the benefit of maximum immediate returns, such conduct denies the very nature of business—which is the creation of additional wealth, and not simply consuming that which has already been created.

### Justice to Employees Is in Owners' Interest

Therefore, if a railway management faithfully fulfills its obligations to the stockholders, it must be just and foresighted, not only in its dealing with employees, but also with the public. Because, if either employees or the public are treated unjustly or arbitrarily (in order to secure a maximum of immediate earnings for the stockholders)—the outcome is bound to be enmity and retaliatory action against the property by the injured parties, which will threaten its future earning power. Is it not, incidentally, a probability that some, at least, of the arbitrary working rules which now plague railroad operation, as well as some of the more restrictive regulatory handicaps, were the product of short-sighted practices by railway managements *in the past*—managements with no history to guide them, who were over-zealous for immediate earnings for the stockholders, even securing these occasionally at the expense of arbitrary and unsympathetic treatment of customers and employees?

Hindsight, at least, has taught the lesson that an excess of zeal by management for immediate earnings, with insufficient concern over the means of obtaining them, is not a sound long-run policy. The fact that the railroads have the benefit of a larger quantity of hindsight than any other large industry enjoys probably explains the lengths to which they will often go to placate employees and customers—lengths which those



not having the benefit of such hindsight often find it difficult to comprehend.

### Management's Responsibility to Preserve Jobs

Railroad management, in short, fully recognizes its duty to railroad employees and the public—at least to the extent of dealing so fairly with them that they will be given no occasion to harbor costly resentment against the carriers. But, as a responsibility of management to employees, this obligation merely to avoid giving them occasion for resentment is negative; employees could not look upon managements as in any positive sense their champions simply because it did not give them occasion for active distrust. No—there is more to management's responsibility than this—in addition to just and sympathetic treatment, management has the further obligation to railroad employees *to do all it can to preserve their jobs for them.*

This obligation, likewise, has its origin in the fact that management represents the ownership of business. If the railroads are to be income-earners on a satisfactory scale for their owners, ten or twenty or thirty years hence—it follows that such income prospects are the best guarantee that employees could possibly have of plentiful and remunerative employment in the years which lie ahead. Managements, thus, in taking steps necessary to keep operations as efficient as possible (resisting increased costs, adopting new and improved materials and methods)—in order that traffic and income may be held to the rails, rather than be diverted to competing agencies of transport—are simultaneously *performing the most important function that can be performed by anyone in the interest of railroad employees—that of preserving their jobs.*

### Wages Are Not Paid Unless a Job Exists

The conclusion that the job-preserving function is the most important service which can be performed for employees follows from simple logic. That is, the job comes first and good wages and working conditions, pensions and the like, come second. There can be good wages and working conditions only if there are men working—and an alleged friend of labor who promises good wages and working conditions and gets these things for the employee, on paper, only at the cost of the employee's job, is certainly not doing the employee any good.

Railroad management's responsibility for maintaining railroad earnings (and of employment along with earnings) does not extend specifically to any one class of employees as against another. That is, management has no responsibility, say, to try to preserve the jobs of trainmen as against those of trackmen, or vice versa. Its responsibility, rather, is directed primarily at maintaining and increasing railroad traffic and earnings. If management succeeds at this task, wages take care of

themselves—because experience shows that, of the total volume of railroad revenue, approximately 47 per cent, year in and year out, is automatically allotted to railroad labor. It is management's further duty to see that this 47 per cent of railroad revenues is expended for the kinds of labor which will best maintain the company's service to the public—and hence of the carrier's future employing power.

### "Make Work" Rules Are Not in Employees' Interest

If one class of employees insists that more of its numbers be employed than are necessary for the work to be done, it is management's duty to resist such an exaction. Such resistance is not injurious to railway labor in the long run; but quite the contrary. That is to say, exactions in favor of one class of labor ("full crew" rules, for instance) simply deny employment to men who would build up the future employing power of the property, while giving the money to those who perform no useful service. By acquiescing in such exactions over a term of years, a railroad would inevitably be in a worse position to compete for traffic (and thus to provide jobs) than if it had spent all of its available wage money for labor which really contributed something to the operation or improvement of the property.

### The Function of the Unions

Very few railroad employees realize that the activities of their labor organizations have no beneficial effect on railroad employees *considered as a whole.* These organizations perform a useful service in protecting the individual employee against arbitrary treatment at the hands of management, but they assume little or no responsibility for maintaining and increasing railroad revenues—which, experience has shown, is the only way by which the well-being of all railroad employees can be improved. Union efforts to improve wages and working conditions, merely by securing concessions from management, have only the effect of determining which particular employees are going to get a predetermined amount of money. These efforts may harm the railroads (and hence the future well-being of employees themselves) by making wages per employee so high that the carriers cannot employ sufficient men to maintain the quality of service necessary to hold traffic. But, as has been repeatedly shown in these pages, *union activity does not increase the share of railroad earnings which is paid out to labor.*

The activities of the labor unions in the direction of increasing wages and working conditions is thus largely an intramural contest of one set of employees against another. On the one hand, it has been an offensive by those connected with the operation of trains and yards against, primarily, those doing maintenance and construction work; on the other, a campaign by which "old



heads" have increased their takings at the expense of the jobs of younger men. In part also, this intramural struggle among employees has been one of lining up those employees who hold good jobs now against the interests of those who might look forward to holding equally attractive jobs in the future—but who will not have any jobs at all if onerous labor conditions forced on the railroads by present better-situated employees cause the carriers to continue to lose traffic to rival agencies of transportation.

### **Wage Money Should Be Spent for Useful Work**

All in all, it appears that railroad managements—in their efforts to improve the efficiency of railroad operation and to expend the *predetermined sum available for wages*, insofar as they can, for labor which will contribute the most toward competitively-superior railroad service—are performing a function of the highest importance for the preservation of present and future employment on the railroads. This service is of more fundamental importance to railroad employees than that performed for them by their unions—because the job has to exist first before good wages can be applied to it; and union activity, as shown above, is frequently directed to the destruction of jobs rather than to their preservation. The preservation of jobs is almost entirely a managerial function, and one in which, in the employees' own interest, management deserves a far greater measure of co-operation than it usually receives.

### **A Duty Done Despite Opposition**

Railroad managements, then, do have the seldom-recognized responsibility to employees to which Mr. Clement has drawn attention. Considering the opposition they continually meet in their performance of this task, they have fulfilled this obligation remarkably well—but not nearly as well as they could fulfill it with a greater measure of co-operation, especially from employees. The opposition managements encounter from their own employees in their effort to manage the railroads in a manner to preserve their employing power springs from the general lack of knowledge by employees of the economic facts which determine long-run employee welfare. The question, therefore, inevitably arises: Whose responsibility is it to put before employees the economic information they need for making intelligent decisions regarding their own welfare? That responsibility must rest upon the shoulders of everyone who stands in a relationship of leadership to the employees—union executives as well as railroad management; because, where else, except from these leaders, could the employees possibly secure this information?

There are difficulties, of course, surrounding the imparting of such information by railroad management. Persons who have a selfish vested interest in employee ignorance will be tempted to denounce facts as false-

hoods, just as they proclaim many falsehoods as facts. Many employees, also, would be prevented by prejudice or sloth from absorbing and correctly interpreting such information, even if it were given to them in convenient and palatable form. Nevertheless, honorable and virile men cannot draw back from a job that needs doing merely because it presents difficulties and because assurance is lacking of its early success. The long-run interests of railroad employees as a whole are identical with those of owners and managements, provided that the latter also are acting intelligently and with foresight for their own long-run welfare. These natural allies ought to get together. There are plenty of enemies on the outside of the industry striving to take away the livelihood of all persons connected with it, and those beleaguered ought to stand together for their mutual defense.

### **Information for Employees—Whose Obligation?**

If there is an aspect of railroad management's responsibility to employees where, possibly, a more satisfactory performance is possible, it is in the persuasive presentation to employees of the fundamentals of the economics of railroad employment. Many railroads are doing a great deal in this direction. Others are doing comparatively little. But hardly anywhere, to our knowledge, are the facts of this situation being presented with the skill and the persistence with which misinformation on the same subject is being purveyed. It will be time to get discouraged at the possibility of finding in genuine education a solution to this aspect of the problem of the railroads when this method has been given the same prolonged and intensive trial by skilled practitioners which misinformation and demagoguery have enjoyed.

## **Maintenance Has Best Year Since 1931**

Prompted by their immediate needs, and in anticipation of increasing demands under the impact of national defense projects and improved business generally, the railways spent more for the maintenance of their roadways and structures in 1940 than in any year since 1931. This amounted to a total of \$497,000,000, which represents an increase of \$30,000,000 over expenditures for the same purpose in 1939, and an increase of \$175,000,000, or 54 per cent, over the similar expenditures made in 1933, the low point of the depression.

For every mile of line operated, expenditures for maintenance of way and structures in 1940 averaged \$2,135, which was, likewise, the highest figure since 1931, when the average expenditure per mile was \$2,191. With the rapid decline in railway traffic following 1931 the average maintenance expenditures per mile



of line dropped to \$1,454 in 1932, and then to \$1,339 in 1933, the smallest in any of the depression years. Successive increases then occurred, to \$1,529 in 1934, \$1,656 in 1935, \$1,920 in 1936, and to \$2,106 in 1937. With the business slump in 1938, average maintenance expenditures per mile of line in that year fell to \$1,792, and then increased again to \$2,000 in 1939, and to \$2,135—a nine-year high—in 1940.

The railways are committed to meet the needs of the country for rail transportation, come what may. That they have made a substantial start in putting their fixed properties in order to this end is evident in the figures quoted, but that it is only a start few will question in view of the severe curtailment in expenditures during

the depression years, the generally increased tempo of rail transportation within this same period, both passenger and freight and the impending large demands that are in sight with the crystallizing of the government's rearmament program, further aid to foreign countries, and the improved business generally that will, unquestionably, follow in their trail.

Recognizing this situation, the railways are planning a further substantial increase in expenditures for roadway and structures in 1941, which, unless upset by unforeseen and unexpected foreign or domestic developments, will make this year in maintenance of way and structures work nearly twice as active as those years during the depths of the depression.

## *Mr. New England vs. Mr. Johnny-Come-Lately*

In New England there are many truck operators whose history stretches way back into the period when their motive power was supplied by "hay-burners." The fathers of many of them founded the existing businesses. The grandfathers of some of them were team-haulers. In that part of the country it is not unusual to find trucking and other businesses that have been owned and managed by one family for more than 100 years.

These concerns are no "fly-by-nights," who will risk annihilation for a quick profit. They have studied the principles of their business. With horses for motive power, they saw their radius contract with the development of rail transportation, and they have watched their radius expand since the advent of motor transport. It is from this sound background of experience that the New England Motor Rate Bureau, Inc., has been developed.

At the beginning of motor carrier regulation this group stood out against the majority vote of their national organization. They insisted that motor transportation rates should be based primarily upon the costs and other conditions inherent in the nature of highway transportation. They have since held steadfastly to this course, in spite of the pressure from motor carriers in other parts of the country who are essentially newcomers to this business.

The New England truck rates were recently reviewed for the second time by the Interstate Commerce Commission in Ex Parte MC-22. It was shown in this record that efficiently organized motor transportation can operate profitably under such a system of rates. Nevertheless, certain motor carriers, which are expanded beyond the true economic radius of truck operation, have opposed the "voice of experience" and urge that the general good of the trucking business requires the adoption of the railroad classification and rate bases for motor transportation.

This stand of these experienced New England carriers has been endorsed unanimously by shipper opinion. Specifically, the Manufacturers Association of Connecticut asserts:

"Not one single shipper or a . . . representative of a shippers organization supported the principle that class rates and classification ratings should be substantially the same as those in force by railroads. On the other hand, liter-

ally thousands of shippers, either directly or through their organizations, introduced evidence in support of the rate making principles that were sponsored in this proceeding by the New England Motor Rate Bureau."

Testimony in this case exploded the specious contention that truck rates based upon railroad rates are intended for the purpose of "distributing the transportation burden" and made quite clear that their real purpose is to enable motor carriers to "pick and choose traffic"—a practice which is demonstrably to the detriment of the public interest in an orderly national transportation system.

The New England Industrial Traffic League wholeheartedly approved the principle of the New England Motor Rate Bureau's cost-plus-profit proposals. It stated these proposals had been analyzed by some of the leading cost accounting organizations of the country, which actually criticized them for failing, in some instances, to net more than 1 per cent profit. The Traffic League further states:

"The parties to this brief realize that occasions will arise where for competitive reasons special treatment from a rate standpoint is justified, but . . . we believe the desired end should be reached through some such medium as commodity rates rather than by tinkering with the proposed basic rate scales in such a way as to undermine the foundations upon which they are constructed."

The League, representing virtually all important New England industry, thus gave its unanimous approval to time-tried principles of highway transportation pricing. Similar approval was voiced by representative groups from Central, Illinois and Trunk Line territories. The attitude of these able and respected Yankees, which embodies the wisdom of long business experience, coincides with the predominant opinion of industry throughout the country. The "voice of experience" refuses to be misled by the lure of temporary gain; it prefers permanent soundness.

It is only the newcomers who want to make a pick-and-choose, speculative venture out of the trucking business. Inexperience and its weakness for quick and easy gains have repeatedly come to grief in this country—for instance in the Florida boom in the 'Twenties. The businesses which stay in business are those which are willing to learn from experience; others' as well as their own.

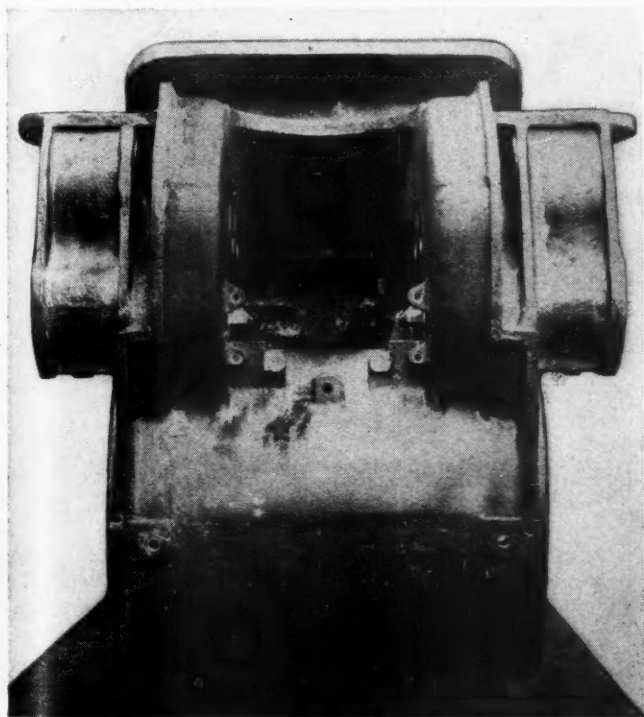




Locomotive No. 5399 After the Installation of the Franklin System of Steam Distribution with O. C. Poppet Valves

## Poppet Valves Tested on the Pennsylvania Railroad

High capacity at high speeds demonstrated by Franklin system of steam distribution on K4s type in road tests and regular service



Outside Elevation of the Poppet-Valve Cylinder for Locomotive No. 5399

**S**INCE the early Fall of 1939 the Franklin Railway Supply Company, New York, has had on trial on the Pennsylvania its system of steam distribution with "O. C." poppet valves.\* The equipment was installed during the summer, on a class K4s Pacific type locomotive at the plant of the Lima Locomotive Works, Inc., Lima, Ohio. The principal characteristics of the locomotive are set forth in the table.

The locomotive, after the poppet valves were installed, was placed in service on the Fort Wayne division where it handled passenger trains between Crestline, Ohio, and Fort Wayne, Ind., and Crestline and Chicago, with periodical trips to Lima for inspection, for about one year. In that time it ran approximately 57,000 miles.

After the first month of road service the locomotive was subjected to a series of road tests with a dynamometer car, duplicating the 1,000-ton passenger-train tests conducted by the Mechanical Division of the Association of American Railroads in October, 1938.† Additional tests with the poppet-valve locomotive were also run with trains both lighter and heavier than the 1,000-ton train of the A. A. R. tests.

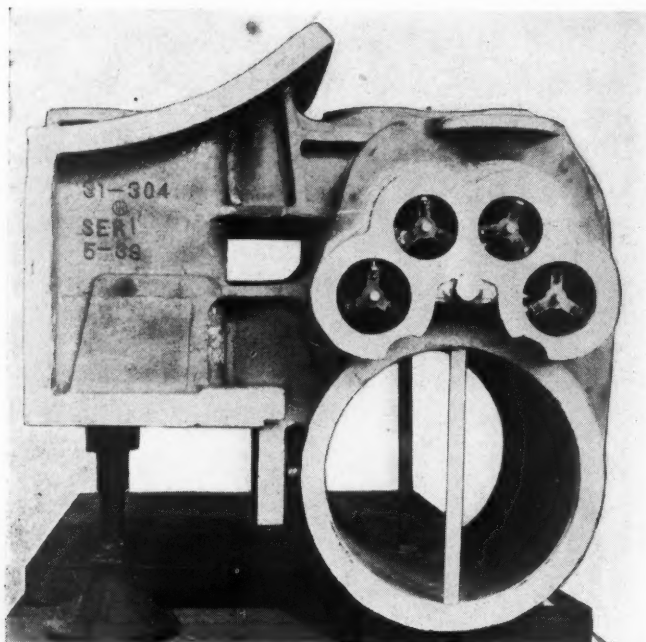
After completing 57,000 miles in road service the locomotive was subjected to an extensive series of tests on the test plant of the Pennsylvania Railroad at Altoona.

In the road tests the poppet-valve locomotive No.

\* For a description of this system and its development see the *Railway Age*, June 17, 1939, page 1019.

† A summary of the results of these tests was published in the *Railway Age*, April 22, 1939, page 699.





End View of the Poppet-Valve Cylinder—The Exhaust Steam Passage from the Outside Valve Is Above and That from the Inside Valve Below the Opening Through Which the Valve-Gear Operating Rods Pass

5399 developed a maximum adjusted drawbar horsepower of 2,980 at 60 to 65 miles an hour, and the curve is almost flat from 50 to 75 miles an hour. Compared with the drawbar horsepower recorded in the A. A. R. tests, the poppet-valve locomotive showed increases of 24.2 per cent at 60 miles an hour, 32.7 per cent at 70 miles an hour, and 44 per cent at 80 miles an hour. The relatively high capacity of the locomotive at high speeds was also clearly evident from its performance in regular service. It repeatedly handled trains alone which are

**Principal Dimensions and Weights of Pennsylvania  
K4s Locomotive No. 5399**

|   |              |
|---|--------------|
| Builder .....   | Pennsylvania |
| Type of locomotive .....  | 4-6-2        |
| Date built .....  | 1924         |
| Rated tractive force, lb. ....  | 44,460       |
| Weights in working order, lb.:  |              |
| On drivers .....  | 208,800      |
| Total engine .....  | 330,800      |
| Engine and tender two-thirds loaded .....                               | 506,366      |
| Driving wheels, diameter new, in. ....                                  | 80           |
| Cylinders, number, diameter and stroke, in. ....                        | 2—27 x 28    |
| Steam pressure, lb. per sq. in. ....                                    | 205          |
| Grate area, sq. ft. ....  | 70           |
| Heating surface (total evaporative and superheater), sq. ft. ....       | 4,984        |
| Number and diameter (in.) of poppet valves for each cylinder:           |              |
| Intake .....  | 4—6          |
| Exhaust .....   | 4—7          |
| Maximum valve lift (all valves), in. ....                               | 1            |
| Average clearance volume, per cent .....                                | 8.41         |
| Steam-chest volume (including steam pipe), per cent of cylinder volume: |              |
| With poppet valves .....  | 73           |
| Standard K4s .....  | 36.3         |

normally double-headed, frequently making better than scheduled running time. While most of the improvement in the performance of locomotive 5399 should be credited to the poppet valves, the increased steam-chest volume and free exhaust passages with which the engine is equipped, contributed to some extent.

In only two cases during the year of road service before the locomotive went to the test plant did it cause train delays chargeable to the steam distribution system. One was caused by a stuck intake valve and the other by a broken valve-gear-box drive pin. There was one

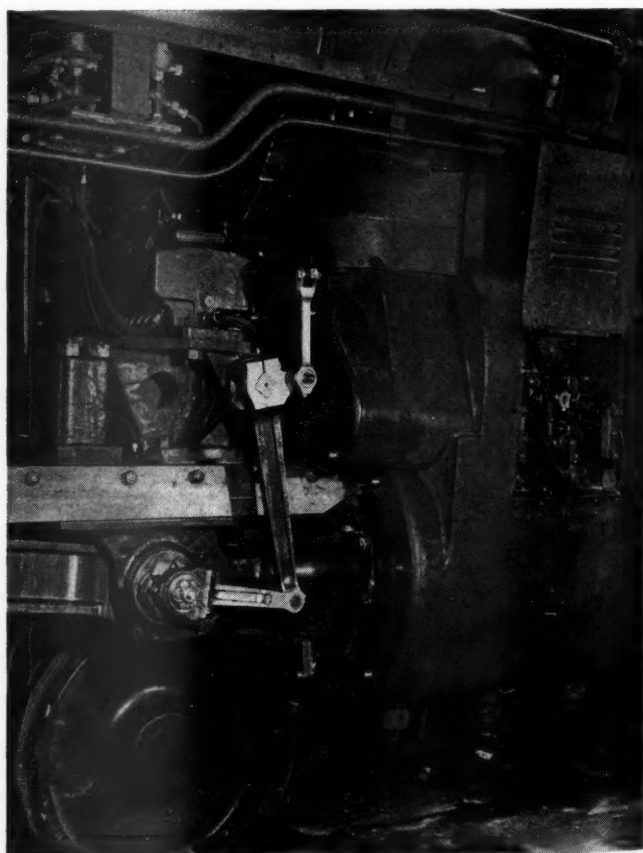
other case of a valve sticking, but no train delay was caused. During the year five exhaust valves cracked and had to be replaced. In nearly every case this was done without holding the engine out of service. On one occasion repairs were also required to the cam-box oil pump and the locomotive was held out of service for repairs to one of the rocker shafts which transmit the drive from the crosshead to the valve-gear box.

To improve the quality of the valves they are now being machined from alloy-steel forgings instead of the commercial bar stock originally used. Changes in the valve-stem guides have also affected marked improvement in their resistance to wear, which is one of the causes of valve wear and of the cracking of the exhaust valves.

During the year the gear box and cam boxes were subjected to periodic inspection. No indication of wear was evident at any of these inspections. As mileage accumulated the cam surfaces and the link and link-block bearing surfaces assumed only a higher degree of polish, reflecting the effectiveness of the lubrication as well as the resistance of the materials in these parts to wear.

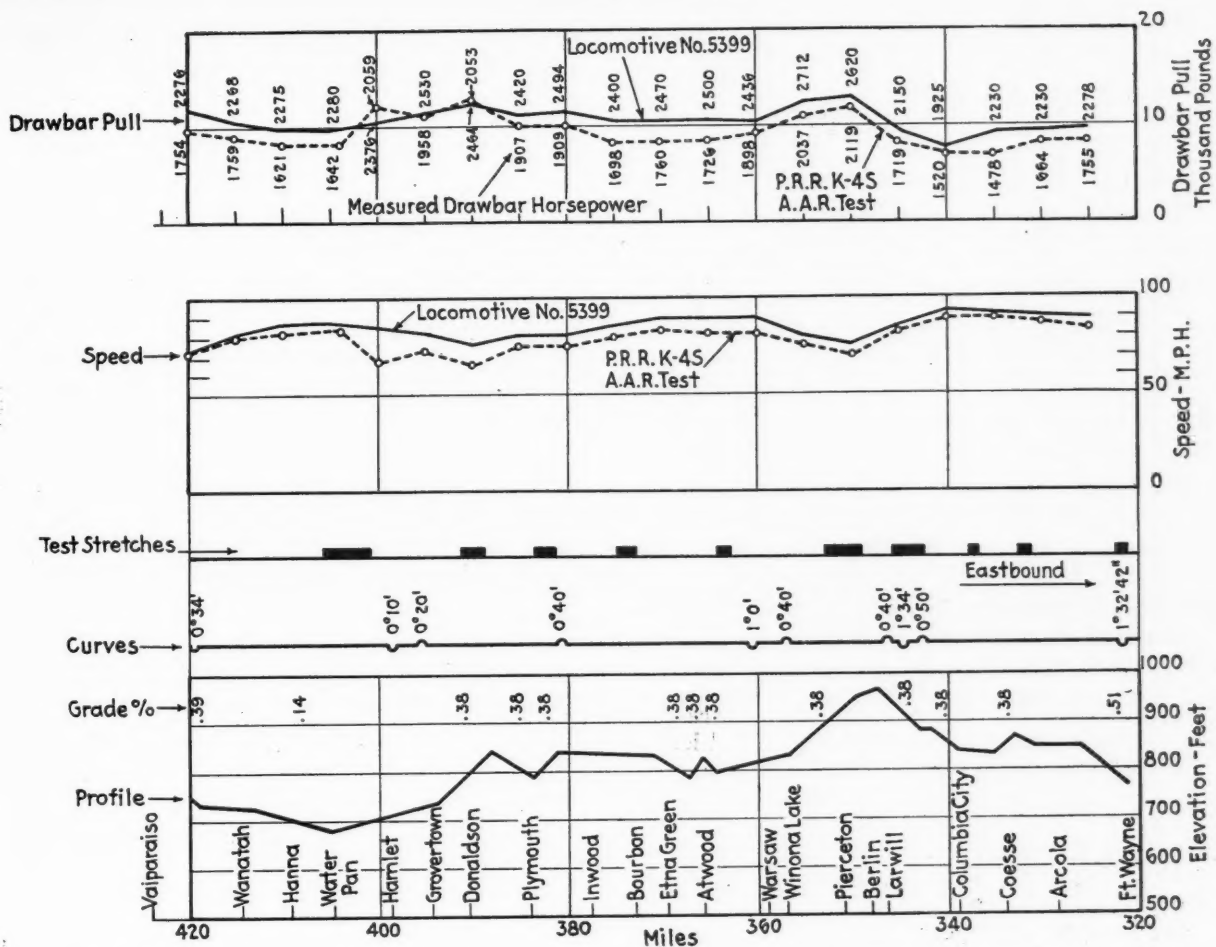
Indicator records of the pressure variations in the steam pipe and steam chest on one side of the locomotive suggested that restrictions to the flow of steam through the original Type A superheater were causing appreciable reductions in cylinder mean effective pressure at high speeds. To improve this condition the locomotive was taken out of service during the summer of 1940 to be fitted with a new superheater header, including a multiple throttle, and with single-pass Type ASW units. It was with this equipment that the locomotive was subjected to the extensive series of plant tests at Altoona.

During the test-plant runs locomotive No. 5399 de-



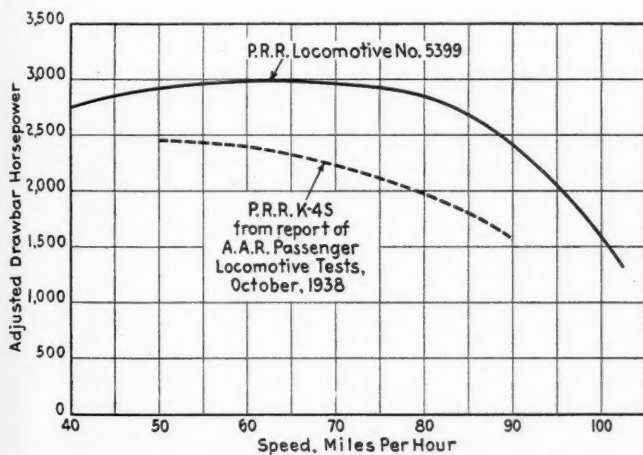
The Valve-Gear Rocker Shaft and Crosshead Connection—The End of the Cam Box Can Be Seen Through Opening in Cylinder Jacket





|  |       |   |         |
|--|-------|---|---------|
| No. 5399:                                      |       | Running cut-offs during test, per cent      | 28.50   |
| Weight of train behind locomotive, tons        | 997.8 | Temperature of steam in steam pipe, deg. F. | 651.685 |
| Average speed, m.p.h.                          | 83.0  | Area of nozzle, sq. in.                     | 45      |
| Maximum speed (from dynamometer chart), m.p.h. | 94.7  | Weight of A. A. R. test train, tons         | 1,005.2 |

Typical Road-Test Performance of Pennsylvania Locomotive No. 5399, Equipped with the Franklin Steam Distribution System, Compared with the Pennsylvania K4s Pacific Type Locomotive Used in the A. A. R. Tests of 1938



Adjusted Drawbar Horsepower Developed in Road Tests by Pennsylvania Locomotive No. 5399

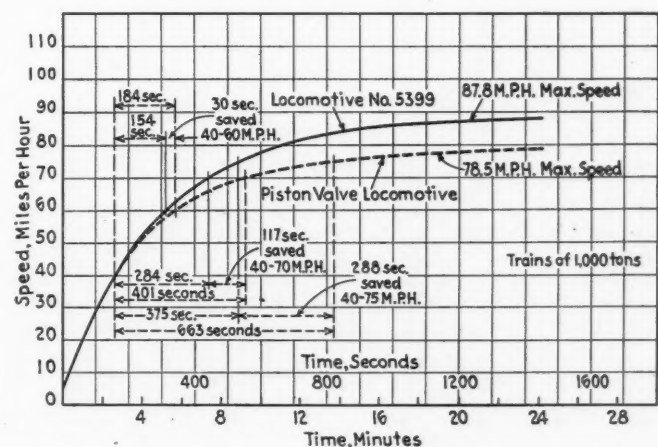
veloped over 4,000 i. hp. on several occasions. At 75 miles an hour and about 30 per cent cut-off the cylinder output was 4,267 i. hp. and the drawbar horsepower, 3,862. This is one indicated horsepower for each 79.5 lb. of engine weight. The cylinders used 69,430 lb. of steam per hour. At 100 miles an hour and about 30 per cent cut-off the locomotive developed 4,099 i. hp. and 3,547 db. hp.; the cylinders used 76,208 lb. of steam per hour.

With an output of 70,000 lb. of steam per hour the

pressure drop between the boiler and steam chest, through the new superheater was only 11 lb. per sq. in.

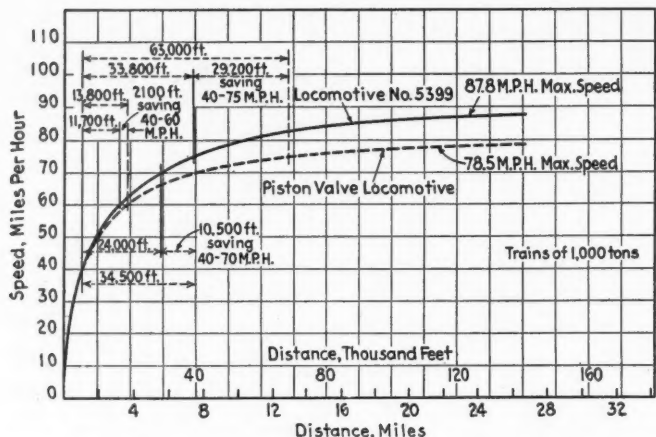
### The Test Locomotive

As installed on engine No. 5399 the Franklin system of steam distribution consists of four parts. These are the steam chests in which the poppet valves are installed and which are cast integral with the cylinders, one at each end of each cylinder; the cam boxes, one mounted



Speed-Time Curves During Acceleration of 1,000-Ton Trains on Level Track—Locomotive No. 5399 Compared with a Standard Class K4s





Speed-Distance Curves During Acceleration of 1,000-Ton Trains on Level Track—Locomotive No. 5399 Compared with a Standard Class K4s Locomotive

on each cylinder between the steam chests; the valve-gear box, mounted on the deck in front of the cylinders, and the power reverse gear.

The principal changes required in the locomotive were the replacement of the original cylinders with new castings incorporating the poppet-valve steam chests, and lengthening the front deck by adding a 9½-in. pilot beam. This was fabricated from steel plates, channels and angles by welding. The Walschaert valve gear was removed and a rocker shaft, supported from the engine frame, placed immediately back of each cylinder. The arm on the outer end of this shaft is driven from the crosshead. The inside arm drives the valve gear through a rod connection to the valve-gear box. Large openings through the exhaust-passage connections between the steam chests and the saddle are provided for these rods. The two oscillating cam shafts in each cam box are driven by rods which extend back from the oscillating-shaft arms of the valve-gear box, one of which furnishes the drive for the intake valves and the other for the exhaust valves. There are two 6-in. intake valves and two 7-in. exhaust valves in each steam chest.

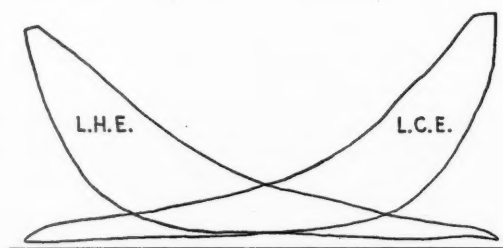
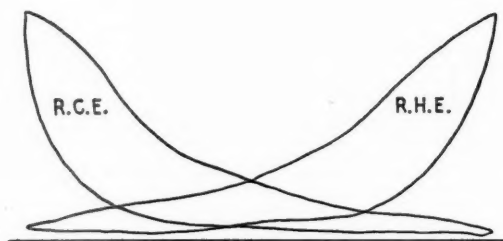
The valve motion is reversed by a train of gears in the valve-gear box driven by a shaft extending through

the rear wall of the box. The reverse gear in the cab consists of an air-motor drive, controlled by a small lever, and a quadrant-type cut-off indicator. A shaft with suitable bevel-gear connections leads from the reverse gear in the cab to the reverse shaft of the valve-gear box.

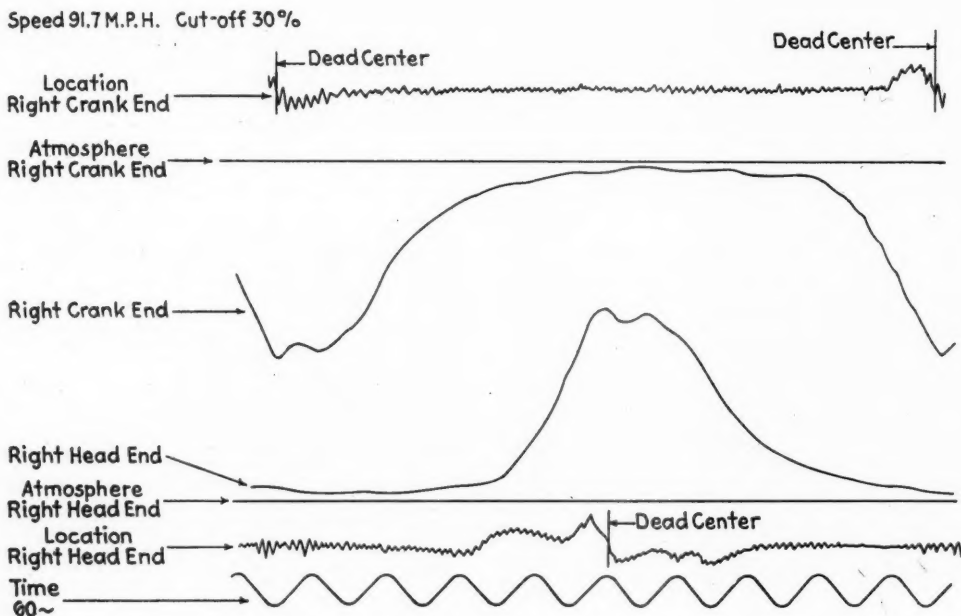
### The Road Tests

The road tests were run on the Fort Wayne division between Fort Wayne Junction, Ind., and Valparaiso, a distance of 103 miles. The test train was made up of the same Pennsylvania dynamometer car used in the A. A. R. tests and Class P-70 coaches. A round trip was made with 15 of these coaches in the train. This train weighed 997.8 tons and compared closely with the A. A. R. train, which weighed 1,005.2 tons. Other runs were made with 9 and 18 coaches in the trains, which weighed 624 tons and 1,177.6 tons, respectively.

On the thousand-ton tests the speeds and the drawbar



A Typical Electric Indicator Card at High Speed Taken from Locomotive No. 5399 During the Road Tests



The Original Record from which the Typical Indicator Card Was Developed



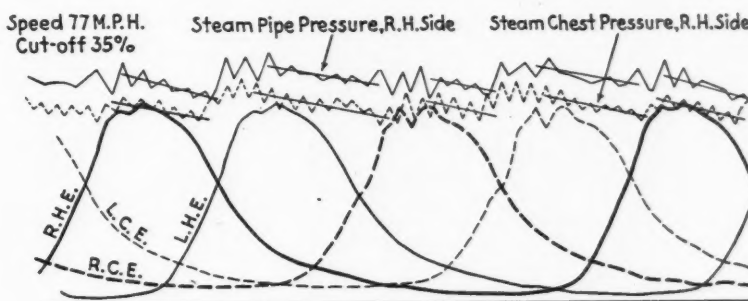
horsepower were, in general, higher than were developed in the A. A. R. tests. The comparison for the eastbound trip is shown in one of the charts.

One of the graphs shows the adjusted drawbar horsepower of engine No. 5399 in comparison with that of the K4s class locomotive employed in the A. A. R. tests. Both curves are calculated in the same manner from data taken when the train was moving on a uniform

during its regular service on the Fort Wayne division. The minimum cut-offs employed during each run varied all the way from 17½ per cent to 45 per cent. During the early part of the service period minimum cut-offs of 25 per cent were recorded for a considerable number of runs and shorter cut-offs for a few. Minimums of 30 and 35 per cent were reported most frequently.

There were many instances in which this locomotive

**Marked Fluctuations in Steam-Pipe and Steam-Chest Pressure on One Side of the Locomotive Are Effected by the Admission to the Cylinders on Both Sides of the Locomotive**



grade usually at least 4,000 ft. longer than the train. The adjusted drawbar pull is obtained by correcting the measured drawbar pull for the effect of grade and of acceleration of the weight of the locomotive and tender. From this the adjusted drawbar horsepower is calculated. This curve indicates clearly the great increase in capacity at speeds of over 50 miles an hour, compared with a locomotive of the same type equipped with piston valves and standard steam passages. The locomotive is capable of doing useful work at speeds above 100 miles an hour.

The high capacity of engine No. 5399 is also shown by its acceleration performance. The comparison is between the highest rate of acceleration of the 1,005.2-ton A. A. R. test train and that effected by engine No. 5399 with a 1,177.6-ton train. Both values were taken from the same piece of track. Corrected for level track, locomotive No. 5399 required only 255 sec. to accelerate the heavier train from 50 to 70 miles an hour, while the same change in velocity of the lighter train required 280 sec. Two of the graphs show speed-time and speed-distance curves, respectively, corrected for trains of 1,000 tons each. On this basis, the reductions effected by locomotive No. 5399 amount to 4 min. 48 sec. in the time and of 5.5 miles in the distance required to accelerate from 40 to 75 miles an hour.

Indicator cards were taken on all dynamometer tests from both ends of both cylinders at test sections of track. For the eastbound runs the test sections are indicated on the test-run chart. On a run handling a regular passenger train additional cards were taken from the right cylinder, and the pressures in the right steam chest and the right steam pipe at the superheater header outlet were recorded at the same time that the cards were being taken.

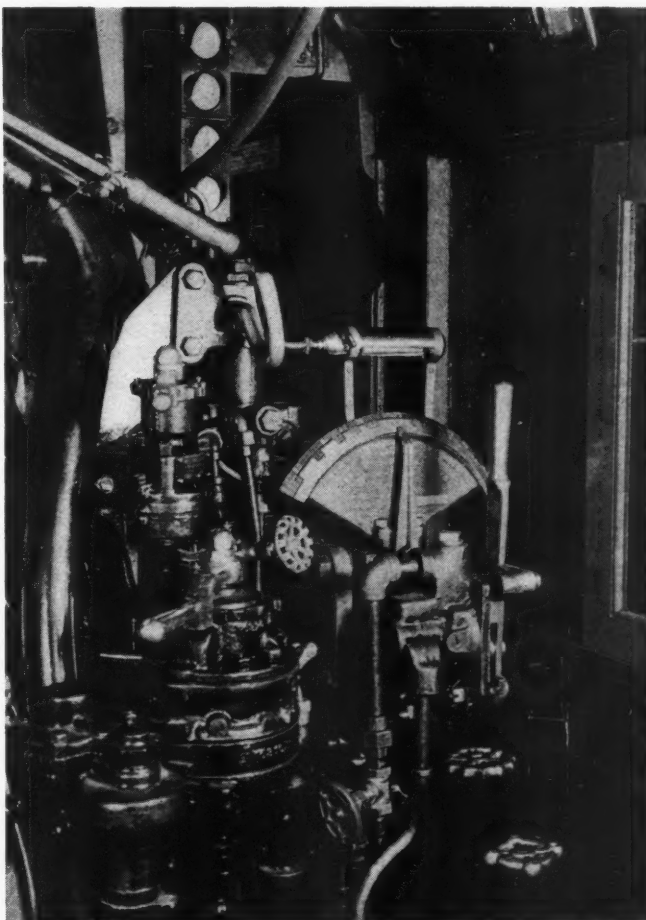
All of these data were taken with special indicators manufactured by the General Electric Company. The deflections of the diaphragm in this indicator are recorded photographically with an oscillograph. A typical record produced by the oscillograph is shown in one of the drawings. The indicator deflections are converted to pressure by the use of appropriate calibration factors. Some of the records were also converted to conventional cards. A sample card taken at 91.7 miles an hour with a cut-off of 30 per cent is reproduced here. It is notable for its well-defined expansion curve, late release, flat exhaust line, and relatively short compression.

Reference has already been made to the high tractive capacity at high speeds demonstrated by engine No. 5399

demonstrated its capacity to make better than running time with trains of 13 cars on the fastest schedules of a very fast division. Two such instances of especial interest may be cited.

On November 5, 1939, engine No. 5399 pulled train No. 49 (The General) from Crestline to Chicago. The train consisted of 13 cars and weighed about 914 tons. It left Crestline nine minutes late, stopped at Fort Wayne for seven minutes instead of the scheduled five minutes,

(Continued on page 388)



**The Reverse Gear in the Cab**





## From Victorian to

Built in 1868, the Old Station at Lafayette, Ind., Was Completely Out of Step With Present-Day Trends in Passenger Facilities

### Transformation of 72-year old Wabash passenger station at Lafayette, Ind., shows what can be done with modern building materials

**T**HE Wabash passenger station at Lafayette, Ind., is 72 years old, but from all appearances, as the result of its recent modernization, it is the most up-to-date passenger station on the road. Built along typical Victorian lines in 1868 and long out-moded in appearance and facilities, the old station structure is today shrouded in a dress of Colonial lines and finish, with changes to the modernistic throughout the interior to replace or hide old wood floors, beaded wood wainscoting, high ceilings and an antiquated arrangement of facilities—all of which spoke of rail transportation of nearly three-quarters of a century ago.

With the exception of a few fundamental changes in architectural lines and partitions, this striking transformation was achieved largely by the extensive use of modern building materials for new exterior siding, and for roof, floor, wall and ceiling coverings, although modern lighting and heating systems and colorfully upholstered chairs and divans play an important part. In effect, the Wabash now has a new station at Lafayette, which is not only highly pleasing to its patrons and to the community, but which is also strictly utilitarian and adequate to meet local requirements.

#### Details of Old Station

The old station at Lafayette, located along the north side of the tracks, was essentially a two-part structure, the principal unit of which was a one-story section, 101 ft. long by 35 ft. wide, with a simple, double-pitched roof, which housed the passenger facilities proper. To the west of this was a three-story section, 24 ft. square in plan, which was used for a baggage room on the ground floor and for office and record space on the upper floors,

the top-most floor being housed within the slate-faced truncated roof which crowned this part of the building. Both sections were constructed of red brick, with timber roofs covered with slate or tin, and were of Victorian architecture to the last detail, with brick trim, dentils and pilasters in profusion, high windows and doors surmounted by corbel arches, and long overhanging eaves with scroll roof brackets.

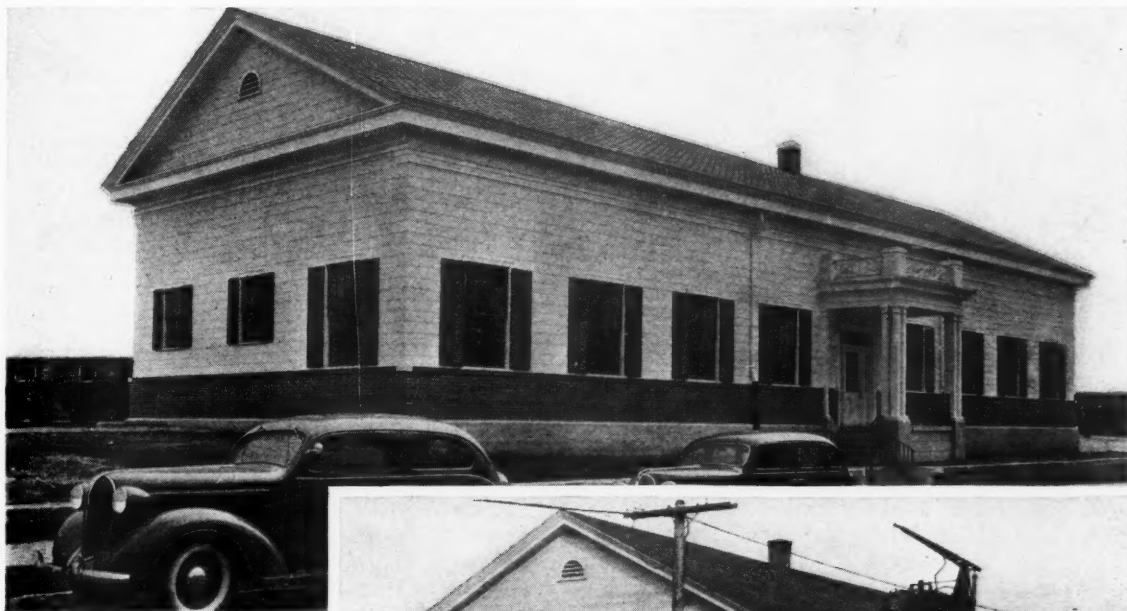
The interior was equally Victorian in layout and finish as the exterior, with two waiting rooms, one for men and the other for women, separated by a completely enclosed ticket office. The floor was of wood, while the ceilings, 16 ft. high, and the wall faces, were of plaster, painted green. There was no basement in the structure, and the heating, as in the days when the building was new, was by means of floor stoves. Artificial illumination was almost as out of date as the heating system, consisting of drop cord lights with frosted globes of an early design.

#### Entirely New Exterior Facing

All of this was changed in the station modernization project, and so completely that only those uninformed concerning the work done would take the present station for other than an entirely new structure. Gone is the three-story section with its tell-tale roof of an earlier era, the floor space of which was no longer necessary under the plan which provides baggage-handling space within the station proper. The overhanging eaves of the one-story section were cut back to 2½ ft. and were completely boxed in to produce a simple Colonial type cornice, and then the entire exterior of the station was faced over with white, asbestos-cement clapboards above a new red brick base, 3½ ft. high. Completing the new dress for



# n to Streamlined Colonial



As Modernized, With a Simple Colonial Dress, as Shown in These Views, the Old Station Is One of the Most Up-to-Date Structures on the Entire Railroad



the exterior, the roof was resurfaced with green asbestos-cement shingles.

The new clapboard siding, furnished and applied in 8-ft. strips, was backed up by  $\frac{7}{8}$ -in. tongue-and-grooved sheathing, with 30-lb. felt between, and the whole was furred out from the old brick walls on 2-in. by 5-in. furring strips set on edge, 16 in. center to center, and bolted through the wall. In applying the new structural face, which, in addition to its pleasing appearance, is durable and both weather and fireproof, several of the old windows were closed off, while the remaining ones were boxed in to a rectangular shape of pleasing proportions and were fitted with sectional-type wood sash. Adding to the Colonial effect thus produced, all of the windows were fitted with stationary slat-type shutters, painted green, in harmony with the new roof covering. Adding further to the Colonial aspect of the station, a small entrance portico, with corner column clusters, an ornamental iron railing and a verandaed roof, was provided at the mid-point of the street side, sheltering a single Colonial-type entrance doorway, set out by sidelight panels. In keeping with the theme of the siding itself, the portico and all of the wood trim were painted white.

### Modernistic Interior

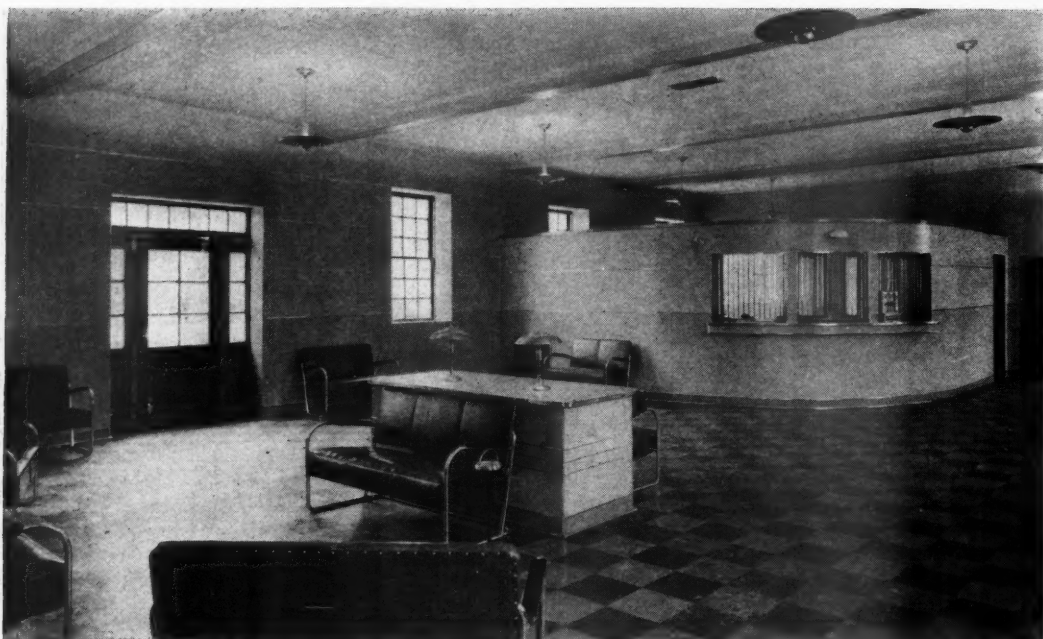
Within the station the changed aspect effected is equally or more striking than the exterior. Here, the old

floor area, 98 ft. long by 32 ft. wide, was completely rearranged through the removal and readjustment of partitions into one large general waiting room, lavatories for men and women, and a baggage room with a built-in heating plant room. The new waiting room is 54 ft. long and the full width of the building, and is supported at its east end, in the extreme east end of the building, by the public lavatory facilities. These latter facilities, which have direct connection with the waiting room, include a women's rest room, 10 ft. by 12 ft., with adjoining lavatory,  $7\frac{1}{2}$  ft. by 10 ft., which backs up to a men's toilet room, which is approximately 10 ft. square. The new baggage room area, which is entirely closed off from the waiting room, except for an employee entrance and a service window with a low counter, occupies the 33 ft. of length at the extreme west end of the building, with a floor area of approximately 1,050 sq. ft., except for a built-in heater and coal room for the new heating system, which occupies its south-east corner, adjacent to the west wall of the waiting room.

Throughout the waiting room, the old wood floor was removed and was replaced with a four-inch concrete slab, reinforced with concrete beams at intervals, and given support on a compacted earth, gravel and cinder fill. This new floor was then covered with an asphalt decorative tile wearing surface in a pattern of black and gray squares, with an eight-inch black border.

Completely obscuring the old wall facing, the walls





Modern Building Materials Revolutionized the Interior of the Old Station, As Is Shown in this View of the Waiting Room

were refaced with buff-colored decorative asbestos-cement wallboard, set up in 24-in. horizontal panels above a 4-ft. wainscoting of similar material in a bright green, with a 4-in. black base. All of this new wall facing, which is fitted with aluminum horizontal joint strips, producing a distinctly modernistic appearance, was backed up with 1/4-in. plywood to give it additional structural stiffness, and was furred out from the walls on 1-in. by 4-in. furring strips.

Erasing another aspect of early station construction, a false ceiling was built over the waiting room and lavatory areas, 6 ft. below the former ceiling, and at a height of 12 ft. above the floor. In harmony with the new wall materials, the new ceiling was faced with cream-colored acoustical tile in a block pattern, on a backing of gypsum board, 1/4 in. thick, and its expanse was broken effectively with a series of ceiling beams, boxed in with asbestos-cement wallboard, finished along its exposed edges with aluminum corner bead.

The new ticket office, occupying an area approximately 20 ft. long by 19 ft. wide in the southwest corner of the waiting room, is essentially a built-in room, without a ceiling, in such position as to be most convenient to patrons. Features of the ticket office enclosure include

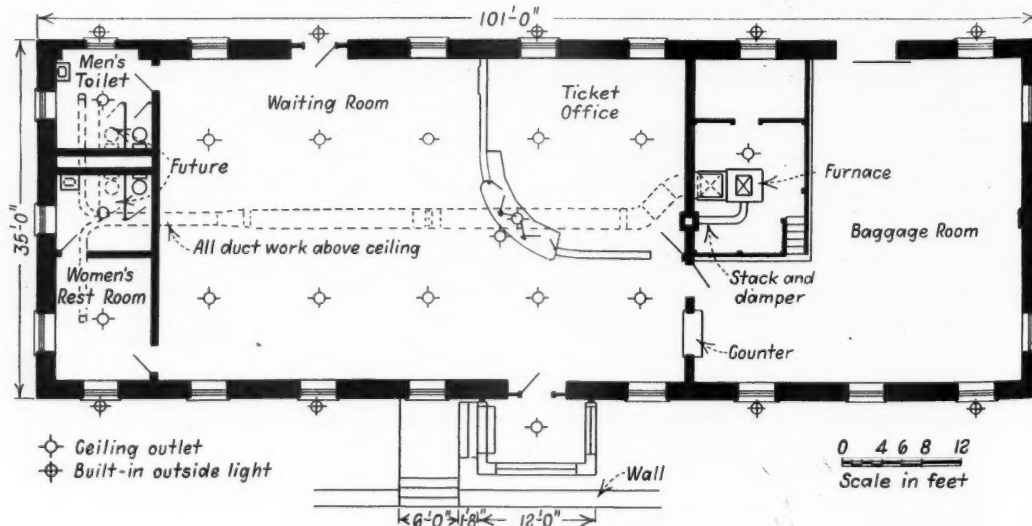
the sweeping curved face which it presents to the waiting room, which carries out in buff, green and black wallboard, with aluminum joint strips and moldings, the decorative effects of the side walls; and three service windows above a green wallboard, white metal-trimmed counter, which are protected with chromium-plated grilles.

Both the men's and women's lavatories were given the same architectural treatment as the main waiting room, with buff and green wallboard walls, cream colored ceilings, and, in the case of the women's rest room, a colorful asphalt tile floor covering on a concrete slab base. The concrete floors provided in the toilet room areas have a smooth cement finish. Both toilet rooms are fitted with the modern lavatory and plumbing fixtures.

#### Leather Upholstered Furniture

Adding appreciably to the colorful modernistic aspect of the station interior is the furniture provided, which includes a built-in table in the center of the waiting room and chairs and settees for one, two and three persons, all with chromium-plated steel tube frames and green, brown, red and black leather upholstery. Two of the larger

General Floor Plan of the Remodeled Station at Lafayette, Ind.





of the settees provided are located in the center of the room, backed up against the built-in table, which supports two attractive table lamps. The table itself is an attractive feature, having a green wallboard top and sides, trimmed with aluminum or white metal moldings, corner beads and counter nosing.

Artificial illumination throughout the waiting room is of the indirect type, by means of a series of 10 simple, yet attractive lighting fixtures, in white metal, which produce a soft uniform light over the floor area. The remodeled station is heated by means of a hot air, coal-burning furnace of the latest type, with air filters, an air distribution fan and thermostatic control. This furnace is located in the heater room already referred to and carries its warmed air to the waiting room and to the men's and women's lavatories through a continuous duct which extends longitudinally along the center line of the waiting room, in the open area above the ceiling level. This duct, which tapers in size from 24 in. by 18 in. at its inlet end to as small as 8 in. by 6 in. at its extreme outlets in the toilet rooms, is heavily insulated throughout its length and has three main outlets in the waiting room ceiling, each 20 in. by 8 in., covered with chromium-plated grilles. The cool air return to the furnace is through a 30-in. by 30-in. grille at the floor level in the west partition wall of the ticket office, to which the furnace, in the heater room, is immediately adjacent.

Little work was required in the new baggage room area other than to cut a new trucking doorway on the track side. However, the interior wall faces of this area were repaired and painted as necessary, and the old wood floor was put in a fully serviceable condition.

The modernization project described, which for all practical purposes has given the Wabash a new station out of a 72-year old structure at only a fraction of the cost that would have been required to have torn down the old station and replaced it with a new structure, was planned and carried out by the building forces of the road under the direction of J. C. Bousfield, chief engineer, and R. E. Mohr, architect.

\* \* \*



One of Three 2,000-Hp. Diesel-Electric Locomotives in Building which the General Electric Company Co-Operated with the American Locomotive Company—It Is for Operation in One of the "Rocket" Trains of the C. R. I. & P.

## New Haven Gets Old Colony Lines

WASHINGTON, D. C.

**R**EVERSING Division 4 which had voted not to include the Old Colony in the reorganized New York, New Haven & Hartford, the full Interstate Commerce Commission on February 26 made public a revised plan of reorganization for this road which would require the New Haven to acquire the Old Colony under certain specific conditions. In the words of Commissioner Mahaffie, who wrote a dissenting-in-part opinion in this case and who was a member of the majority on Division 4 which had approved the prior report, details of which were given in the *Railway Age* of April 20, 1940, page 715: "Except as to the Old Colony, the report now issued modifies [Division 4's report] very little." Commissioner Porter, who also approved the prior report likewise wrote a dissenting-in-part opinion, affirming his original belief that the New Haven should not be forced to acquire the road without immediate relief from the losses incurred by the passenger operations of the Old Colony.

### Tie-up with Old Colony Abandonment Case

The instant case was reopened last year by the commission, after Division 4's final plan had been promulgated, at the request of the Old Colony bondholders and certain municipal and state interests in Massachusetts in order that they might show that because of certain curtailments and proposed curtailments in passenger service on the Old Colony's so-called Boston-group lines that road could be operated at a profit as a part of the New Haven. At the same time the Old Colony asked authority from the commission to abandon the operation of the Boston group. In an accompanying decision (reviewed in this issue's news department) the commission denied the road authority to abandon the lines of the Boston group, saying that the freight operations were profitable, but that it had no authority under the Interstate Commerce Act to authorize the abandonment of passenger operations. However, citing the United States Supreme Court's decision in the case of *Palmer versus Massachusetts* the commission found authority under section 77 of the Bankruptcy Act, to deal with the passenger service situation and attached a condition to the reorganization plan of the New Haven which may serve to mitigate the losses incurred by the Old Colony in its passenger operations on the Boston group.

This condition provides that upon the request of the reorganized New Haven, the commission will as soon as possible after December 31, 1942, estimate for the calendar years 1941 and 1942, the average yearly loss in revenue and the average yearly savings in expenses, taxes, and rentals of the system of the reorganized company, if the operating properties of the Old Colony had not been operated as a part of such system in 1941 and 1942. If such estimate of average yearly loss in revenue does not exceed such estimate of average yearly savings in expenses, taxes, and rentals by an amount equal to the annual contingent interest charges on the income bonds to be issued in the acquisition of the properties of the Old Colony, then the reorganized New Haven will be under no obligation to continue passenger service on the Boston group of lines.

If such a request is not made before December 31, 1942, the reorganized company may make a similar request before December 31, 1945, in which event the commission will make similar estimates of average yearly



loss in revenue and average yearly savings in expenses, taxes and rentals for the years 1941 to 1945, inclusive with like attendant results as provided for the years 1941 and 1942. The plan also provides that in making the estimate of the average yearly savings in expenses, taxes, and rentals, the commission shall not include any part of expense actually incurred in 1941 or 1942 which it finds to have been abnormal or unwarranted.

Although this condition is no sure-cure for the troubles of the Old Colony, there is ample evidence in the commission's decision to lead one to the belief that the majority fully realizes the importance of relieving the New Haven from the large losses incurred on the Boston-group passenger operations. At one point in the report the majority say that "it is essential to any sound plan for the reorganization of the Old Colony and the acquisition of its properties and assets by the principal debtor (New Haven) as a part of the reorganization plan of the latter, that it provide assurance that the present heavy loss from the passenger service of the Old Colony will be eliminated or very largely reduced."

#### **New Plan Effective as of January 1, 1940**

The supplemental plan of the commission which would become effective as of January 1, 1940, also provides that in consideration for the properties and assets of the Old Colony, the reorganized New Haven should issue and deliver to the trustees of the Old Colony \$2,467,200 of its first and refunding bonds, series A; \$3,289,600 of its income bonds, series A; \$5,345,600 of its preferred stock, series A; and \$5,345,600 of its common stock.

In addition, the New Haven would assume and pay the reorganization expenses of the Old Colony, current liabilities, and taxes. All claims of the New Haven or its trustees against the Old Colony or its trustees, and all claims of the Old Colony or its trustees against the New Haven or its trustees or the Bankers Trust Company would be released.

The supplemental report also points out that since the amount of reorganization securities to be issued to the Old Colony will only permit the distribution to the holders of its bonds, including pledge bonds for the principal thereof of 15 per cent in fixed interest bonds, and of 20 per cent in income bonds and of 32.5 per cent each in preferred stock and common stock, there will be no reorganization securities available for distribution to its stockholders. Under these circumstances the commission finds that the stock of the Old Colony has no value or equity and that its holders should not participate in the reorganization.

The provision in Division 4's plan for the disaffirmance of the New Haven's guaranty of the stock of the Boston Railroad Holding Company would be modified to provide that such provision should not be construed to impair any lien on the publicly held preferred shares of the Holding Company on the assets of the Holding Company.

#### **Porter Would Act Now**

Commissioner Porter, in his dissenting-in-part decision, asserts that the condition regarding the abandonment of passenger operation on the Boston group is premised on certain dictum in the decision of the Supreme Court of the United States in the case of *Palmer versus Massachusetts*, 308 U. S. 79, and the provision of subsection (b) of section 77 providing that provision may be made in a plan of reorganization for the amendment of the charter of a debtor if it is necessary in the execution of the plan. He then quotes the language of the Court in the *Palmer* case which involved the New Haven and

its relation to the Old Colony to this effect: "It would violate the traditional respect of Congress for local interests and for the administrative process to imply power in a single judge to disregard state law over local activities of a carrier the governance of which Congress has withheld even from the Interstate Commerce Commission, except as a part of a complete plan of reorganization for an insolvent road."

"As I read the above decision," writes Commissioner Porter, "this was expressed to point out that although a bankruptcy court under its inherent equitable powers or this commission under the Interstate Commerce Act could not grant certain relief to an insolvent railroad, such relief could be effected as a part of a plan of reorganization under section 77 if the railroad could not be financially rehabilitated without relief from certain obligations imposed by state authority. My understanding of the majority's report, however, is that it has not found that the present passenger service operations of the Old Colony are such that it cannot be financially rehabilitated without relieving it of the obligation to conduct such operations. On the contrary, the majority find that the evidence of record is not such as to justify any such relief at present. In my opinion, the decision of the majority in this connection in effect is simply an attempt to invest it with authority, which authority it does not have under the Interstate Commerce Act, to order discontinuance of passenger operations, if it determines after the reorganization has been effected that such discontinuance should be effected. I cannot persuade myself that section 77 can be construed to authorize this commission to make a determination and afford relief after the consummation of a reorganization in a matter over which it has no authority under the Interstate Commerce Act.

"From my consideration of the record," concludes Commissioner Porter, "the financial rehabilitation of the Old Colony is dependent upon relief from passenger service operation on the so-called Boston group of properties. I do not believe that we should, at large expense to the New Haven's creditors who are not holders of Old Colony securities, provide for the acquisition of the Old Colony, something which the New Haven is under no legal compulsion to do, without providing as a part of the plan of reorganization for discontinuance of passenger service on the so-called Boston group of properties, to become effective not later than the time when the reorganization is consummated. In all other respects I concur in the report of the majority."

#### **Mahaffie Favors Public Assessment**

"Where I differ from the majority," wrote dissenting-in-part Mahaffie, "is that I would not require the New Haven security holders to assume that burden. If the public insists on service that costs more than is paid for it the deficit should be made up by a public assessment rather than by one levied against the New Haven bondholders. I would affirm the Division 4 action and permit the reorganization of the New Haven to proceed. I would defer the reorganization of the Old Colony until it appears that it can reasonably be expected to earn more than its operating expenses."

The decision notes that Commissioners Splawn and Patterson did not participate in the disposition of the case.

Accompanying the revised New Haven report was also a supplemental report making certain minor changes in the reorganization of the Boston & Providence which would be included as a part of the reorganized New Haven. Details of this acquisition of the B. & P. by the New Haven were given in the review of Division 4's report in the *Railway Age* of April 20, 1940, page 715.



# Is Transport Plant Adequate?\*

Careful analysis of probable traffic and carrier capacity suggests  
latter is ample—Overexpansion unwise

By Ralph Budd

President, C. B. & Q., and Member National Defense Advisory Commission

**M**EASURED by available service, either per capita or per unit of traffic, this country has the most, and the best transportation which any country in the world has, or ever has had. We are not dependent alone upon any one means of transport; we have five: Railways, highways, waterways, airways, and pipe lines, each being used in the places and for the types of service chosen by the shippers and travelers, whether they be government officers, commercial producers, consumers, or private individuals. The freight traffic of the country is handled in about the following proportions: Railways 62 per cent, highways 9 per cent, Great Lakes 14 per cent, other inland waterways 3 per cent, pipe lines 12 per cent, and airways a fraction of one per cent (but an important and increasing traffic). Ninety per cent of all passenger travel is in private automobiles; about 5 per cent on railways; the same amount on buses; and one-half of 1 per cent in airplanes.

The estimated investment in our transportation plant is 53 billion dollars, of which 48 billion is divided almost equally between the railways and highways, 4 billions is in waterways, slightly less than one billion in pipe lines, and about 200 million in airways.

## Transport Plant Excessive—But Nobody Knows By How Much

This enormous transportation plant has been too large for the needs of the country. Surplus of facilities has been accompanied by excessive competition; freight rates and passenger fares have been reduced, and service improved, in the competitive scramble for the famine loaf. Financial disaster has overtaken some carriers, both by railway and highway, but this does not indicate that there is deterioration in the physical condition or service provided. On the contrary, a period of reorganization usually is one of improvement and rehabilitation of the property; earnings are used for such purposes instead of for payment of interest on outstanding bonds. No public transportation agency can survive if its service is not well maintained.

There is no way of determining just how much surplus transportation exists in this country, because during the past decade, while some forms of transport still have been in the expansion stage, the total volume of traffic has been smaller than what should be considered normal. Then that part of transportation which is represented by the 27 million private automobiles is not measured in terms of commercial capacity. Travel for pleasure, which accounts for perhaps half of the use of the private automobile, is limited in extent only by the leisure time of the car owner and his family, and their ability or choice in financing more mileage. The use of private automobiles constitutes a large and important segment of the



Ralph Budd (at right) receiving the Washington Award Plaque (established 1919) for "vision and courageous leadership in advancing the technological frontiers of high speed railroad transportation." Mr. Budd is the first railway officer to receive this recognition

transportation of the country, as well as a large part of our way of living. Moreover, it has greatly reduced the amount of travel by railway and bus, because under many circumstances the automobile offers superior convenience.

The year of the greatest rail passenger travel was 1920, when it amounted to approximately 47 billion passenger miles. The low point was 16½ billion in 1933. In 1940 it amounted to nearly 24 billion, or about half as much as in 1920. The decline in railway freight has not been so drastic, although the trend has been inevitably downward as a result of competition, duplication of facilities, and business depression. The years 1926 and 1929 recorded the high marks in railway freight. In each of those years about 53 million carloads were handled. The low point was in 1932, when the volume was little more than half of 1929. In 1940 the railways handled 36½ million carloads, or 68½% as much freight as they did in their best year.

## 1939 Carloadings Jump Unparalleled

War broke out in Europe in the summer of 1939 and large war orders were placed in the United States. There was an increase in traffic from August to October, 1939, which had no parallel in previous railway history. The question arose whether the railroads would be able to handle the traffic, which grew to 856,289 carloads during the third week of October. That they did so without delay or congestion, and without using all of the available equipment, was very creditable, especially consider-

\* A paper presented before the Western Society of Engineers, Chicago, on February 24.



ing how unexpectedly the increased volume was thrown upon them.

The impetus to the manufacture and export of war material for use abroad not only was sudden, but so marked that it may have overshadowed the effect of the European War on other parts of this country's economy, such as the closing of export markets for products of agriculture. The industrial sections of the country became active and have so continued, while purely agricultural territory has suffered. In some sections, and for some commodities, there has been increased need for transportation, while less has been needed for others.

With the inauguration of our own program of preparedness in May, 1940, the question again arose whether the transportation facilities of the country would be equal to the demands. The freight traffic of the year 1940 was handled successfully without any transportation shortage. It averaged nearly 100,000 carloads a day; 2,442,000 more cars than were handled in 1939, an increase of 7.2 per cent. However, this larger volume was handled with a maximum of 837,651 cars in one week, or 18,638 less than the 1939 peak, because the traffic moved more uniformly and tended to level off the summits and valleys of the curve. This applied to all forms of transportation.

#### No Seasonal Peak in Defense Traffic

The importance of handling more freight without such a high peak is that if the traffic load is spread more evenly over the year, the capacity of the carriers will be greatly increased. The normal period of heaviest carloading lasts four or five weeks in the autumn, and there is a large surplus of some types of cars and locomotives during the balance of the year. Looking at our industrial expansion we see factories being built, reopened, expanded, retooled, and otherwise prepared for production of war materials which are unlike their normal output. It is quite understandable how these changes and increases in manufacturing would lead to a popular impression that the transportation facilities of the country likewise should be changed and increased. But this overlooks fundamental differences between manufacturing and transport. In general, transportation for defense is not unlike that for ordinary commerce; cars loaded with materials for peace and for war move in the same trains; the same car, truck, or vessel may be loaded with war materials in one direction and peace materials in the other. The same pipe lines handle gas and oil for defense and for commercial uses. The similarity of service extends to the handling of passengers, whether it be by land or by air.

The adaptability and elasticity of transportation facilities, thus, are in marked contrast with the special and often single purpose of a manufacturing plant. Also transportation for defense is spread over the time consumed in the successive periods, first of construction, then of production, and in many instances, such as the building of cantonments and munition plants, the daily transportation load is greater during the period of construction than it is after their completion.

The inherent nature of common carrier service is to be ready for any kind of movement of persons or goods, in any direction, *on demand*. Cars, trucks, and vessels are loaded, moved and unloaded; reloaded, moved and unloaded, *ad infinitum*. The most important thing for these carriers to know as far in advance as possible, is how much, and what kind of traffic they will be called upon to handle, and when, and where.

Two examples may serve to illustrate how differently the important commodity movements need to be planned. Take iron ore and grain. The ore is a prime material

of defense and of commerce, both because of its indispensability and because of the large quantities required. Government economists estimate a total of 91,000,000 short tons in 1941, by far the largest in history. About 85 per cent of this ore comes from the Minnesota and Wisconsin ranges, by rail to Duluth, Two Harbors, Superior and Ashland, where it is loaded into lake carriers and taken to the Chicago district and the lower lake ports. From the latter it goes to lake front furnaces or by rail to smelters and mills throughout the East, the Pittsburgh area containing the largest consumers. This is the most highly specialized movement, for one of its magnitude, anywhere in the world. To a large extent the cars used do not see any other service, although all this heavy traffic is handled to Chicago and the lower lake ports during the season of lake navigation, May to November inclusive.

The mining and handling of the ore is in the hands of experts who have developed the technique and have done the job for many years. They understand what is required and are preparing for the largest season of record. The railways involved have, or will have, the necessary cars and locomotives. The lake cargo carriers have, or will have, the necessary vessels. There are some things that the Advisory Commission to the Council of National Defense can do to assist in assuring that this vital movement will be successfully handled, but the greatest assistance is to refrain from interference.

The handling of the winter wheat crop is said by the Association of American Railroads to present the heaviest single box car distribution problem. Spring wheat presents a similar problem, but one of lesser magnitude. Cars are brought from various places to the area of principal production, Texas, Oklahoma, Kansas, and Nebraska, prior to June in anticipation of the harvest and based upon the best estimates available. Unlike ore, the quantity of wheat to be transported is quite uncertain, due, of course, to the weather. In 1940 the Kansas crop was more than 60 per cent above estimates which were made a comparatively short time before harvest, and new high records were established in grain received at terminal markets. This will happen again. The use of combines for harvesting grain results in offering the carriers vast quantities very suddenly. The winter wheat crop of 1940 amounted to nearly 590,000,000 bushels. The present condition indicates a larger harvest in 1941, but it is well to remember that it is a long way from the green field to the granary.

The handling of the winter wheat crop in 1941 is further complicated by the large stocks of old grain now on hand, the largest ever at this time of year. Where the grain will move, and how much of it will move, are still unknown. As the harvest season approaches it will require the best of cooperation between the shippers, the carriers, and the receivers of grain to make wise plans, and then to carry them out successfully. If there should be lack of storage, and the grain movement thereby delayed, it should not be charged to transportation, because nothing would be gained by undertaking to use box cars for storing grain. They will be needed for other traffic.

#### Transport Overexpansion Not in National Interest

One of the duties of the Transportation Division of The Advisory Commission has been, and is, to assist in ascertaining future traffic requirements. The importance of reliable information is twofold: First, of course, to make sure the carriers are ready; and, Second, to avoid overexpansion, which would weaken the defense effort in other essential directions.

Various methods have been used in making several studies of the problem, and the results have been checked



and compared. These methods have ranged from predictions based on the general effect of the expenditures of certain sums of money for the preparedness program, to those based upon the detailed quarterly forecasts made by the thirteen Shippers' Regional Advisory Boards. These latter have proved to be very accurate. For example a summary of their estimates for the first quarter of 1941 indicated an increase of 9.5 per cent over like period of 1940. The actual loadings for the first seven weeks of 1941 show 9.8 per cent increase. We are much indebted to the Association of American Railroads for its findings, which have as a background many years of experience and statistics of the most comprehensive character, including those of the World War period. Finally, we have the compilations of the Bureau of Research and Statistics, Advisory Commission to the Council of National Defense.

In order to give as long a view ahead as possible, that Bureau has studied and analyzed the National Defense Program, giving weight to its effect on individual purchasing power, and taking into account export materials and supplies, chiefly for Great Britain. The estimates were in tons of the various commodities to be used in defense work and additional tons in non-defense activities. They were compared with actual production during the twelve months ended September 30, 1940, the latest twelve-month period for which detailed statistics of railway freight traffic were available.

One of the factors considered in arriving at estimates of commodity requirements in 1941 and 1942 was the probable national income in those years. Government economists estimate that the 1941 national income will be 14.9 per cent above that of 1940, and 2.6 per cent above that of 1929; and that 1942 income will be 11.8 per cent above the 1941 estimate, 28.4 per cent above 1940, and 14.6 per cent above 1929.

#### How Carloadings Are Predicted

The estimates of commodity requirements in 1941 and 1942 have been carefully analyzed by the Bureau of Railway Economics, in terms of railroad transportation, and the results translated into equivalent carloadings of revenue freight. Carloadings, rather than tons, were used as the unit of railroad freight service because they are the most current of all railroad statistics and are the best single measure for gauging equipment requirements.

The commodities or commodity groups, for which the Bureau of Research and Statistics supplied estimates of requirements, relate to 60 per cent of the total carload traffic originated by the railways. They relate to a much larger proportion of the commodities entering into the national defense program. By applying the relative production increase estimated by that Bureau, the Bureau of Railway Economics calculated the carloadings for 1941 and 1942. To the remaining carload commodities the Bureau of Railway Economics applied percentage increases based largely on the estimates for related products.

As to certain mine products not included in the estimates of the Bureau of Research and Statistics, the Bureau of Railway Economics applied the same average rate of increase as for those mine products for which estimates were supplied. This same method was followed in regard to products of forests.

The Bureau of Research and Statistics estimated the requirements in 1941 and 1942 for about one-half of the general group of commodities classified as manufactures and miscellaneous. Their estimates largely covered such outstanding items as petroleum products, iron and steel, copper, lead, and zinc; cement and brick; motor vehicles. The remaining commodities include some that will show varying rates of increase, and others that will probably

experience little or no increase. For those manufactures and miscellaneous commodities for which detailed estimates were not supplied, the Bureau of Railway Economics has assumed that the relative increase will be one-half as great as for those for which estimates were supplied.

As to products of agriculture and animals, the Bureau of Research and Statistics assumed no increase, because the November, 1940, monthly bulletin on "The Agricultural Situation," issued by the Bureau of Agricultural Economics, United States Department of Agriculture, states that the output of agricultural products for 1941 is expected to be about the same as in 1940, and the national forecast of the Regional Shippers' Advisory Boards as to the freight car requirements for agricultural commodities for the first quarter of 1941 indicates little change, compared with the first quarter of 1940.

As to the less-than-carload freight, the Bureau of Railway Economics estimates no increase in 1941 and 1942, as cars now assigned to that service can handle a larger tonnage than is now moving. With an increase of 7.2 per cent in total carloadings in 1940 over 1939, the number of cars utilized for l. c. l. freight, actually declined 1.9 per cent.

#### Loadings Estimates for 1941 and 1942

The production estimates of the Bureau of Research and Statistics, translated into carloadings by the Bureau of Railway Economics and supplemented by its own calculations for commodities not covered by those estimates, show the following results:

Total carloadings in 1941 are estimated to exceed those of the calendar year 1940 by 3,426,628 carloads, or 9.4 per cent, an average increase of 65,900 cars per week. This would bring estimated total loadings for the year 1941 to 39,780,237 cars, an average of about 765,000 carloads per week.

Loadings in 1942 are estimated to exceed those of the calendar year 1940 by 6,140,373 carloads, or 16.9 per cent, an average increase of 118,100 cars per week. This would bring estimated total loadings for the year 1942 to 42,493,982, an average of about 817,200 cars per week.

Table I compares these estimates of carloadings for the calendar years 1941 and 1942 with actual carloadings in the calendar year 1940.

Table I—Total Revenue Freight Carloadings

| Calendar Year           | Carloads   | Increase Over 1940 |          | Increase Over 1941 |          |
|-------------------------|------------|--------------------|----------|--------------------|----------|
|                         |            | Carloads           | Per cent | Carloads           | Per cent |
| 1940 (actual) . . . . . | 36,353,609 | .....              | .....    | .....              | ..       |
| 1941 (est.) . . . . .   | 39,780,237 | 3,426,628          | 9.4      | .....              | ..       |
| 1942 (est.) . . . . .   | 42,493,982 | 6,140,373          | 16.9     | 2,713,745          | 6.8      |

Loadings of revenue freight by Class I railways attained the all-time peak of 53,100,000 cars in 1926, an average of more than one million cars per week. The average again exceeded one million cars per week in 1929, fell sharply to 542,000 cars per week in 1932, climbed back to 724,000 cars per week in 1937, and averaged slightly less than 700,000 cars per week in 1940.

Table II shows average weekly carloadings in 1926, 1929, 1932, and the five years 1936 to 1940, compared with estimated loadings for the years 1941 and 1942.

These current figures and future estimates compare with the railways' best past performance as follows: Carloadings in 1940 were 68.5 per cent of those in 1926 and 1929, the two best years; there will be about 76 per cent as many carloads of freight handled in 1941 as were handled in 1926 and in 1929; loadings for 1942 are



estimated at about 81 per cent of those in 1926 and 1929.

Those most familiar with the capacity of our transportation facilities are satisfied that the increased traffic,

Table II—Carloadings, Actual and Estimated

| Year       | Average Weekly Carloadings | Year              | Average Weekly Carloadings |
|------------|----------------------------|-------------------|----------------------------|
| 1926 ..... | 1,021,131                  | 1938 .....        | 585,713                    |
| 1929 ..... | 1,015,922                  | 1939 .....        | 652,144                    |
| 1932 ..... | 541,922                    | 1940 .....        | 699,108                    |
| 1936 ..... | 694,406                    | 1941 (est.) ..... | 765,000                    |
| 1937 ..... | 724,432                    | 1942 (est.) ..... | 817,200                    |

as indicated by the forecasts for 1941 and 1942, can be handled without congestion or delay. I agree with them, for it certainly appeals to railway men more as a promise than as a threat to be told that they will have to handle about three-fourths as much traffic in 1941 as they handled in 1929. The capacity of highway trucks, pipe lines and water carriers is larger than ever before, and increasing. Together they would carry perhaps a third of the total load including defense, that is, about half as much as the railways would carry.

#### Equipment Capacity—Now and in '20's

It has been suggested that because there are less cars and locomotives now than there were in 1929, and because the average age of equipment is older, that their carrying capacity must be less. No mathematical formula exists which can be used either to prove or disprove this conclusion. The railway rehabilitation and betterment program which has been carried out since 1923 has cost \$9,500,000,000. New cars and locomotives have larger capacity than those which they replaced, in the case of locomotives, as much as 3 to 1.

Existing units have been rebuilt so that they are modern for practical purposes and much more efficient than when they were new. Cast steel car trucks and engine frames, A. B. air brakes, large coupler shanks, roller bearings, and light reciprocating parts, to mention only a few items, have rejuvenated old cars and locomotives. These things and the use of better and heavier rail, double-shoulder tie plates on large creosote treated ties, rail anchors, clean graded ballast, a considerable mechanization of track maintenance work, automatic color light signals, and centralized traffic control have made possible the stepping up of the whole tempo of operation. In the ordinary conduct of business today this improvement of transportation and its complete dependability are everywhere accepted, as evidenced by the greatly reduced inventories, so-called hand-to-mouth buying, and the reliance of assembly plants, far removed from factories, upon the daily arrivals of shipments. By no means is this confined to the railways; trucks are used very extensively for their rapid and dependable service, and of course airplanes afford still quicker dispatch almost everywhere.

Those who are directly in charge of and responsible for providing transportation feel sure that the plants and personnel can be kept ready and able to meet the future requirements as they arise. Obviously, it is important to do this without unduly increasing the plant, because the direct defense efforts would suffer if the output of mines, mills and factories were diverted from munitions to transport units beyond the amount necessary.

Since September, 1939, the railroads have placed in service 84,117 new freight cars and 620 new locomotives, which have enabled them to keep ahead of requirements. There are 54,557 new cars and 238 new locomotives now being built. This equipment, together with other orders

now under consideration, will continue to take care of the needs. Furthermore, the new equipment is of the exact type and kind required. Such selective purchasing and ordering are made possible by the methods of estimating herein described, which bring together the commodities and localities requiring additional equipment and enable the carriers to acquire it as they find the need. The detailed estimates and basic data from which they were prepared are available to all of the railroads.

#### Transportation Men Know Their Business

Successful handling of the nation's traffic requires prompt release of cars at destination. It is an elementary fact that cars cannot be used for warehouse purposes without crippling transportation. Failure to unload them on arrival was the chief cause of congestion and delay during the World War. With that experience as a warning and guide it seems reasonable to assume that the difficulties it led to will be avoided. No other single thing is so important in this connection as to make certain that cars are not loaded until provision has been made for unloading them promptly.

Admittedly, I look at the transportation features of preparedness with eyes that keep in sight the great advances in the art, as well as the great expansion of facilities in recent years. I view it also in the light of deep respect for the experience of those who are managing the operations of all of the various carriers, and for the example immediately before us of their current accomplishments. The greatest service that can be rendered, to insure the continued successful functioning of transportation, is to help these men by keeping them as thoroughly informed as far in advance as possible of what demands will be made of them, and by giving them the public support which the vital character of the business deserves. If that is done we may be sure of satisfactory results.

#### Poppet Valves Tested On the Pennsylvania Railroad

(Continued from page 379)

and passed Liverpool (the end of the Fort Wayne division) 11 min. ahead of time. For the 131.7 miles from Crestline to Fort Wayne the average speed was 67 miles an hour. For the 117.8 miles from Fort Wayne to Liverpool the average speed was 77.7 miles an hour. From Warsaw to Liverpool, 78.8 miles, the speed averaged 84.43 miles an hour. These speeds are all based on train-sheet time reports.

On November 15, 1939, engine No. 5399 pulled a special train from Chicago to Crestline against a heavy east wind. This train consisted of 13 cars and had an approximate weight of 1,150 tons. It made the 148 miles to Fort Wayne in 2 hr. 13 min., the exact running time of No. 28 (the Broadway Limited). Its only advantage was not making the regular Englewood stop. From Fort Wayne to Crestline the 131.7 miles were made in two hours, which is 5 min. less than the running time of No. 28. From Chicago to Fort Wayne the average speed was 66.8 miles an hour. From Fort Wayne to Crestline the average was 65.8 miles an hour. In both cases slow-downs for speed restrictions and to scoop water are included, and in the latter case there was also a stop for coal.

[An account of the test-plant tests will be printed in a later issue.—Editor.]



# Great Western is Reorganized

Second major road to emerge from  
trusteeship under a new  
corporate set-up



Patrick H. Joyce

**A**T midnight on February 19, the Chicago Great Western became the second major railroad to emerge from trusteeship, when properties of the Chicago Great Western Railroad Company were transferred to the Chicago Great Western Railway Company which was recently incorporated in Illinois. The signing of orders by the federal district court last week directing the transfer marks the end of this road's receivership which began on February 28, 1935, when the road petitioned the court for authority to reorganize under section 77 of the bankruptcy act.

When the district court ended the receivership, it also signed ancillary orders authorizing the purchase of the St. Paul Bridge & Terminal properties, now leased, for \$1,500,000 and the borrowing of \$6,400,000 from the Reconstruction Finance Corporation secured by \$9,000,000 of first mortgage bonds. While no definite date has been set for the exchange of securities it will probably take place within a couple of weeks.

The effective date of the reorganization plan is January 1, 1938, and the new first mortgage bonds will bear interest from that date. A total of 6.8 per cent of the accumulated interest on the 4½ per cent general mortgage bonds will be paid when the new bonds are issued and the balance by April 1, 1941.

Patrick H. Joyce, who has been trustee during the receivership, was elected president and chairman of the executive committee of the new company. Other corporate officers are: Chairman of the board and general counsel, Ralph M. Shaw, who was general counsel during the receivership; vice-president of traffic, Oscar Townsend, who held the same position with the old company; vice-president of transportation, H. W. Burtness, who was assistant to the trustees and secretary; vice-president of maintenance of way, structures and equipment and stores, S. M. Golden, who was assistant to the trustees; assistant to the president and secretary, B. F. Parsons, who was assistant to the trustees; controller W. H. Sievers, who was general auditor; treasurer, A. A. Sieg, who was assistant treasurer; and assistant secretary, E. T. Reidy, who was secretary to the president.

The Chicago Great Western Railroad Company was incorporated on August 11, 1909, as the successor under a plan of reorganization dated June 1, 1909, to the Chicago Great Western Railway which was sold under foreclosure on August 21 of the same year. This company owned the entire capital stock of the Mason City & Fort Dodge Railroad Company, and the Leavenworth Terminal Railway & Bridge Company. The Omaha Grain Terminals was controlled by the Chicago Great Western through its subsidiary, the Mason City & Fort Dodge. On July 1, 1934, the Great Western also took over the properties of the St. Paul Bridge & Terminal Co. and the St. Paul Union Stockyards Company under a 99-year lease.

## Not Insolvent at Time of Receivership

The 1,518 miles of lines comprising the Great Western serve the middlewest. The main line extends from Chicago to Minneapolis, Minn., and St. Paul and branches reach Kansas City, Mo., and Omaha, Neb. The road was profitable during its early life and was able to pay dividends of from 1 per cent to 2 per cent annually on its cumulative preferred stock from 1915 to 1919. However, it returned from government ownership in poor condition. Its traffic had been diverted to other lines and it was handicapped by the inability of the northwest to support higher freight rates. In addition, at the time of receivership, its passenger traffic had practically disappeared and it was confronted with the fact that since only a little more than one-third of its total freight originates on its lines, highly profitable operations were difficult. However, in spite of these conditions the company earned its fixed charges 1.68 times in 1929, 1.74 times in 1930, 1.48 times in 1931, 0.30 times in 1932, 0.74 times in 1933 and 0.68 times in 1934.

The outstanding point of weakness at the time of receivership was not a heavy fixed interest charge but unusually heavy charges for equipment and joint facility rents, which over a long period of years have been more than the interest charges. When the application for re-



ceivership was filed, Patrick H. Joyce, president, stated that the company was not insolvent and could have continued in operation but that better attention could be given to the actual operation of the railroad with its financial problems lifted by a plan which he thought could be consummated in a short time. At this time, the company had few creditors and none with debts more than six months old. All equipment trust obligations have been paid to date.

The Interstate Commerce Commission, in formulating a plan of reorganization in 1938, took cognizance of the necessity and usefulness of the property in the general network of railroads and its chance to hold or to increase its proportion of rail traffic at profitable rates. In 1910 the freight traffic of the Great Western was well balanced, with 26 per cent of the tonnage agricultural products, 28

4½ per cent bonds to be allocated in exchange for 15 per cent of the principal amount of their bonds and accrued and unpaid interest thereon to January 1, 1938; and capital stock for the remaining 60 per cent of their bonds and interest. Of this 60 per cent, 45 per cent will be paid in new preferred stock and 15 per cent in new common stock. Holders of \$46,673,500 of preferred stock will receive \$11,518,375 of new common stock. Present common stock holders will not participate.

Patrick H. Joyce, the president of the new company, has been associated with the Great Western since 1929, prior to which time he was engaged in the railway supply business. During his association with the Great Western he has been aggressive in developing traffic and established the policy of identifying the railroad more closely with the people in the territory which it serves. That he intends to continue this policy is reflected in a letter sent to officers and employees when he took over the new company, in which he said, "In entering upon its activities, the new company finds among its most valued assets the goodwill that has been developed through the years. To preserve and enhance this goodwill should be our constant and earnest endeavor. The railway possesses the plant, the equipment and the organization to perform promptly and efficiently all of the transportation service for which it may be called upon. The degree and continuity of uses of these services will be in direct proportion of the way in which each of us perform his own particular duties."

During his service with the railroad he also initiated a program for the rehabilitation of the properties. He replaced old motive power with new and purchased several hundred modern freight cars. The purchase of these heavier locomotives was accompanied by the rebuilding of 40 bridges and the reinforcing of 6 others, together with the strengthening of the track by the laying of heavier rails and the installation of additional ties.

Mr. Joyce was born in Chicago, March 6, 1879, and after serving as a trainman, he entered the railway supply business in 1909, when he organized the Illinois Car & Manufacturing Co., Hammond, Ind. In 1918 he participated in the organization of the Liberty Car & Equipment Co., and in the following year, in the formation of the Liberty Car Wheel Company, which companies, in 1921 were merged with the Illinois Car & Manufacturing Co. He continued as president of this company until 1928 when it was acquired by the Standard Steel Car Company which retained Mr. Joyce as vice-president. Later he was elected president, which position he held until March, 1930, when Standard was sold to the Pullman Company. On July 9, 1931, he was elected acting president of the Great Western and on November 2 was made president.

\* \* \*



The Great Western Serves Minnesota, Iowa, Illinois and Missouri

per cent products of mines, 23 per cent manufacturers' products and 9 per cent animals. By 1934 this relationship had changed so that manufacturers' and miscellaneous freight produced 36 per cent of the total tonnage and 40 per cent of the freight revenue, agricultural products 27 per cent of the tonnage, mines 19 per cent and animals 14 per cent. The road is essentially a carrier of consumer goods and its operations are dependent upon other roads in the territory.

#### New Company Can Meet Charges

The plan of reorganization promulgated by the I. C. C. scales down the capitalization so that the railroad can easily meet its fixed charges out of expected earnings. The total capitalization of the new company is \$63,091,827, as compared with \$131,000,000 for the old company and fixed charges are \$829,000, as compared with \$1,600,000. The new securities include \$10,130,100 of first mortgage 4 per cent bonds, series A; \$6,113,600 of general mortgage 4½ per cent bonds; 366,104 shares of 5 per cent \$50 par value preferred stock; and 352,639 shares of \$50 par value common stock. This compares with a previous funded debt of \$40,598,600 and capital stock of \$91,282,900.

Holders of first mortgage bonds will receive in exchange therefor and in payment of accrued and unpaid interest as of January 1, 1938, \$10,159,660 of new first mortgage 4 per cent bonds, on the basis of 25 per cent of the principal amount of their holdings and accrued and unpaid interest \$6,113,000 of new general mortgage



This "Midway" Furnishes Access for Men and Materials to the Canadian National Transcona Shops Near Winnipeg, Man.



# NEWS

## Harrison Sees Curbs on Press

Assails W. S. Journal on failure to embrace new order; also paid vacations

Declaring "that before long the citizenry of this nation is going to rise up and very properly demand that the right of free press be limited," George M. Harrison, chairman of the current movement by the 14 non-operating railroad unions for vacations with pay, has written a lengthy letter to the *Wall Street Journal* excoriating that publication for its opposition in a recent editorial to the vacation movement, its figures on the cost of such vacations and its conservatism generally. The letter, as printed by the Journal on February 26, consumes 2½ columns of small type.

Mr. Harrison takes the Journal to task both for specific alleged misstatements—and omissions—and for general failure to keep pace with the "new thought." He challenges the Journal's estimate of \$190,000,000 as the annual cost of vacations (equal to total 1940 net) as a seven fold exaggeration of the cost as estimated by him. Impending train length and full-crew legislation which the editorial cited is a complete surprise to Mr. Harrison, as "there is not even any such legislation now before the Congress." "You are just guessing," he writes. "And what you are trying to lend whatever influence *The Wall Street Journal* may have, and frankly I don't think that will be very much in this case, to an effort to sabotage the railway employees' vacation program by not only misrepresenting the facts as to that program but by tying this program up with some hypothetical demands that don't even exist. This is your idea I suppose of freedom of the press and of national unity in our defense effort."

Chief criticism is of the Journal's attitude in general. Mr. Harrison calls the editorial in question "misrepresentation and propaganda" and goes on to write "What you are doing, and what the press generally is doing, as was very clearly demonstrated during the recent presidential campaign—you are sacrilegious (sic) the right of freedom of press—to the extent that before long the citizenry of this nation is going to rise up and very properly demand that the right of free press be limited."

Later there comes a threat or a promise of a new regime which is coming into the world with a reference to "the new order which Britain is now building—a new order which will establish the real democracy,

### B. & O. Will Give Away Personality-Development Book

The Baltimore & Ohio has announced through its employees' magazine that it will send without charge a copy of Dale Carnegie's "How to Win Friends and Influence People" to any employee of the road requesting it and agreeing to read it. In addition the road is offering six prizes ranging from \$100 to \$15 and ten prizes of \$10 each for the best 500- to 1,000-word articles on "How Dale Carnegie's Book Helped Me." Suggestion for the plan of book distribution was made by W. F. Reilly, traveling freight agent of the road at Chicago.

economic as well as political, and, a way of life as different from the way of 1939 as free capitalism was from the feudal system that preceded it."

Mr. Harrison's letter also charges the railroads with obstruction of the defense program because they refuse to discuss a "question involving an insignificant cost and representing a reform long overdue and a reward long ago earned by railroad workers." Further on this he writes that "the adopted policy of this nation today as expressed by the President of the United States presupposes fundamentally that the defense program will not be resorted to by employers as an excuse for breaking down those social gains which recently have been so belatedly made in this country. The corollary of this proposition is that the defense program should serve as no justification for the refusal of recalcitrant employers to make social adjustments which are already long overdue, which are meritorious in their nature, and which are reasonable from the standpoint of cost and the financial condition of industry. The railroad vacation program certainly falls within this category."

### Priorities Set Up for Machine Tools

Acting by virtue of authority granted the Executive in the National Selective Service Act of last year, E. R. Stettinius, Jr., director of priorities of the Office of Production Management, issued an order on February 24 which places aluminum producers and machine tool builders under a mandatory priority status. The order, which expires on May 31, 1941, was put into effect to speed up the defense program and hasten the delivery of machine tools. It directs machine tool makers to "serve all such defense orders in preference to any non-defense orders, in so far as this course is necessary to comply with the delivery dates on such defense orders."

## Old Colony Must Keep Boston Lines

But I. C. C. paves the way for dropping of unprofitable passenger services

While denying the application of the Old Colony trustees for authority to abandon the so-called Boston-group lines, the Interstate Commerce Commission at the same time has paved the way for discontinuance of unprofitable passenger service on those lines, if the operation of such service proves burdensome to a reorganized New York, New Haven & Hartford system. Such would be the effect of a condition the commission has incorporated in a revised plan of reorganization for the New Haven, which contemplates inclusion of the Old Colony in the reorganized system. The revised New Haven plan is embodied in a supplemental report in the reorganization proceeding, reviewed elsewhere in this issue.

"The real question in connection with the Boston group," said the report on the proposed abandonment, "is not whether its [the old Colony's] lines of railroad should be abandoned, but whether the passenger service over those lines should be discontinued because of the heavy out-of-pocket loss which has been suffered from such service in recent years and which was still being suffered when the hearings in this proceeding closed. That issue is not presented in this proceeding and is one over which this commission has no jurisdiction under the Interstate Commerce Act. It is an issue, however, which is presented in F. D. 10992, New York, New Haven & Hartford Railroad Company Reorganization, under the Bankruptcy Act, and which is dealt with in the report in that proceeding which is being issued contemporaneously herewith."

The reorganization-case report reveals that the condition, stated briefly, involves an offer by the commission to compare for specified years estimated losses in revenue with estimated savings in expenses which the reorganized New Haven would have experienced if it did not have the Old Colony. If such estimated losses in revenue do not exceed the estimated savings in expenses by an amount equal to contingent charges on securities issued in connection with the Old Colony acquisition, then the New Haven "shall thereafter be under no obligation to continue passenger service on the Boston group of the Old Colony."

Returning to the report on the abandonment proceeding (docketed as F. D. No.



12614), the conclusions of the commission are set forth in part as follows: "It is admitted that if the Boston group were confined to freight operations, with all passenger service discontinued, revenues would exceed expenses. For the large deficit shown by the segregation study the passenger service has been and is responsible. Recent efforts by the management, with the co-operation of state authorities and the communities, to reduce the loss on that service have met with some degree of success, but much remains to be done before it will be self-supporting. Whether or not that result can be attained is a question which cannot be positively answered on this record. All that can be said is that it is within the bounds of possibility, if the present co-operation is persistently continued, and particularly if some means can be found of lessening the financial burden now involved in the use of the Boston Terminal Company property.

"There is no justification for abandoning lines of railroad which can be profitably operated in freight service. Especially is this true of lines which serve a thickly populated area in which there is a large industrial development. The lines of the Boston group serve such an area and afford the Old Colony its only entrance into one of the largest cities of the country, in which it also owns extensive and valuable freight yards and a half interest in the Union Freight Railroad, which directly connects with the Boston & Maine system. Furthermore, the evidence shows that the lines of the Boston group are now of very considerable importance in connection with the prosecution of the program of national defense and that because of that fact they will have the benefit in the immediate future of substantial increases in freight traffic."

The national-defense angle arose because a shipbuilding plant at Fore River and an ammunition depot at Hingham are served by lines proposed to be abandoned. Dissents of Commissioners Porter and Mahaffie were noted while Commissioners Splawn and Patterson did not participate. Altogether about 97 miles of line were involved in the abandonment applications.

### Fan Trip

The New York, Ontario & Western will run a special trip over its Monticello and Port Jervis branch (which has had no regular passenger service since 1933) on March 16. The special will leave from Weehawken, N. J., and make stops at Monticello, N. Y., and Middletown for dinner and supper, respectively.

### Arizona Limited to Operate Until April 15

The Arizona Limited which the Chicago, Rock Island & Pacific and the Southern Pacific placed in operation between Chicago and Phoenix, Ariz., for the winter season from December 15, 1940, to April 1, 1941, will continue to operate until April 15 as a result of popular demand.

### Congressman Lea to Address A. R. E. A. Luncheon

Clarence F. Lea, member of Congress from California and chairman of the House Committee on Interstate and Foreign Commerce, will address the annual luncheon of

the American Railway Engineering Association during its convention at the Palmer House, Chicago, on Wednesday noon, March 12.

### B. & O. Puts Mechanics on Six Day Week

The Baltimore & Ohio will place all mechanics on its system on a six day, 48-hour week, effective March 1. The change from the present five-day, 40-hour week basis, in effect since 1932, will affect between 12,000 and 15,000 men. They will receive straight time for six days and time-and-a-half for Sundays and holidays.

### Southwest Board Meeting

The fifty-sixth regular meeting of the Southwest Shippers Advisory Board will be held at Waco, Texas, on March 6. Roger Miller, manager of the Southwest division of the Chamber of Commerce of the United States will speak on The Southwest and Its Part in the National Defense Program, at a luncheon sponsored by the Chamber of Commerce, the Junior Chamber of Commerce and the Traffic Club of Waco.

### Equipment Officer to Join Latin American Tour

A. M. Hamilton, foreign sales manager, American Locomotive Sales Corporation, New York, (an Alco affiliate) will be a member of a party of prominent American research, industrial and banking executives who will make a "tour of industrial exploration" in March to principal South American nations, under the auspices of the National Research Council. Invited participants were selected from a group of more than 300 originally considered.

### Would Let Alaska Indian-Service Ships Serve Public

Delegate Anthony J. Dimond, Democrat of Alaska, has introduced in the House of Representatives H. R. 3540 which would authorize the Secretary of the Interior to transport government and non-government freight and passengers on Indian Service ships operating between continental United States and Alaska and in Alaskan waters. The bill would require the freight and passenger revenues to be turned over to the Treasury for credit to the appropriation available for the operation of the ships.

### Would Make Carbon-Black Truck Rates Higher Than Rail

Truckers of carbon black from points in Louisiana, Oklahoma and Texas to points in Ohio should be able to retain "their fair share" of the traffic at rates made 105 per cent. of contemporaneous rail rates, according to findings recommended to the Interstate Commerce Commission in a proposed report by Examiner A. S. Parker. But while the examiner would have the commission require the establishment of the aforementioned differential, he would at the same time have it find that truck rates on the rail basis had not been shown to be below minimum reasonable rates.

The proposed report is in I. & S. Docket No. M-883, and it embraces also Nos. MC-C-175 and MC-C-213. "It appears," said Mr. Parker, "that an attempt should be

made herein to correlate respondents' rates with those of rail carriers in such manner that each of these agencies of transportation may continue to enjoy its fair share of the traffic available. The advantages inherent in shipment by truck are evident. They should, as nearly as possible, be equalized by the adjustment of rates in an endeavor to prevent a further and unnecessary lowering thereof, with its consequent diminution of carriers' revenues."

### D. L. & W. to Release 200 Mechanics for Defense

The Delaware, Lackawanna & Western is planning to work its shops full time as nearly as business will permit, according to President William White. About 200 employees of its mechanical department will thereby be released for work in defense industries; their railroad seniority rights will be preserved in the interim in accordance with their working agreement. The move is being made in accordance with a program of the National Defense Railway Industry Committee, consisting of management and labor representatives, which contemplates that railroads will determine shop programs for 1941, and on that basis arrange to work their forces as nearly full time as practicable so that men of the mechanical crafts not necessary for railroad work may be released to the defense industry and to other railroads.

### Demand for Special-Type Flat Cars

Chairman W. C. Kendall of the Car Service Division has advised all railroads of demand conditions which necessitate expedited handling of special type flat cars of the depressed center, well, and gun-truck varieties. The demand, Mr. Kendall said, has developed as a result of "increased production of heavy machinery for national defense projects and general industrial expansion"; and, meanwhile, the total ownership of the eligible cars "is relatively quite limited, being principally confined to the East and there chiefly to one railroad."

### 1940 Air Traffic

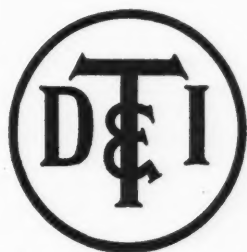
Domestic air carriers transported 58.86 per cent more revenue passengers in 1940 than in 1939, while the revenue passenger-miles flown were up 53.64 per cent, according to statistics made public by the Civil Aeronautics Administration. The number of passengers carried last year totaled 2,727,820 compared with 1,717,090 in 1939.

Meanwhile, the number of pounds of express carried was up from 1939's 9,514,299 lb. to 12,506,176 lb. last year, an increase of 31.45 per cent. The increase in express pound-miles flown was 28.23 per cent.

### Pipe Lines Get More Time on Rate Case

Pipe line common carriers earning over eight per cent on their property valuations have been given another 60 days, i.e., until April 23, to show cause to the Interstate Commerce Commission why an order should not be entered requiring rate adjustments calculated to reduce their earnings to the eight per cent basis. The show-cause order involved was issued in No. 26570, Reduced Pipe Line Rates and Gath-





**IS PREPARING NOW**



**TO DO ITS PART IN  
—FUTURE—**

**DEFENSE MOVEMENT**

The Detroit, Toledo and Ironton R. R. Co. has recently placed an order with the Lima Locomotive Works for an additional four high-speed, heavy-duty freight locomotives of the type illustrated above. This railroad is preparing *now* for the forthcoming rush of defense shipments by ordering new locomotives capable of handling increased loads quickly and economically.

LIMA LOCOMOTIVE WORKS



INCORPORATED, LIMA, OHIO

March 1, 1941

17



ering Charges; the commission's decision in that proceeding was reviewed in the *Railway Age* of January 11, page 145.

### Tax Relief for a Railroad in New York City

Justice Meier Steinbrink of the New York State Supreme Court allowed reductions totaling \$3,693,450 in the assessed valuation for purposes of taxation of property of the Pennsylvania in Queens borough, New York City, for the period July 1, 1938, to June 30, 1940. The city originally assessed the property \$15,172,400 for the two-year period. Justice Steinbrink reduced this valuation to \$11,478,950. The property is owned by the Pennsylvania Tunnel & Terminal Railroad Company, a subsidiary of the Pennsylvania, and consists of facilities at the east end of the tunnels leading to Pennsylvania station.

### Railroad Entitled to Direct Own Truck Operations

Rejecting the contention of protesting motor carriers, led by American Trucking Associations, Inc., that railroads should be left to arrange co-ordinated freight service through tie-ups with competing trucking companies, the Interstate Commerce Commission has conditionally authorized the Louisville & Nashville to install its own highway operations on routes between Elizabethtown, Ky., and Madisonville, and between Nashville and Hopkinsville. This decision was embraced in Chairman Eastman's majority report (noted briefly in the *Railway Age* of February 22, page 358) in that proceeding wherein the commission also modified the most restrictive of the conditions which it has been imposing in order to insure that co-ordinated highway freight services of the railroads will remain auxiliary to or supplemental of railroad service.

In acting favorably on the L. & N. application, the commission rejected the recommendation of the joint board which heard the case. The commission gave that recommendation "the weight to which it is entitled," but nevertheless found that the proposed L. & N. operation "will not endanger or impair the operations of existing carriers contrary to the public interest." The report's title case was docketed as No. MC-61438, while the L. & N. application was No. MC-89811.

### Club Meetings

The Canadian Railway Club will hold its next meeting at the Windsor hotel, Montreal, Que., on March 14 at 8:15 p. m. C. W. Braden, traffic manager, National Distillers' Products Corporation, will present an illustrated paper entitled "The Romance of Rail Transportation."

The Car Department Association of St. Louis will hold its next meeting at the Hotel DeSoto, St. Louis, Mo., on March 18 at 8 p. m. F. C. Hasse, general manager, Oxweld Railroad Service Company, will present a paper on "Unionmelt" welding, accompanied by motion pictures. Dinner and a social period will precede the meeting at 6 p. m.

The Southern & Southwestern Railway Club will hold its next meeting at the Ansley hotel, Atlanta, Ga., on March 20,

at 10 a. m. C. T. Hansen, district sales manager, Standard Stoker Company, will present a paper on "The Value of the Locomotive Stoker in Conducting Transportation." A motion picture illustrating the behavior of the fuel bed in a locomotive firebox under various rates of combustion will be shown.

The Traffic Club of Newark, N. J., will hold its next regular meeting at the Robert Treat hotel on March 3. All 25-year members will be guests of honor at the meeting, entitled "Old Timers Night." The next forum of the club will be held at the Robert Treat hotel on March 10, when railroad passenger operations will be discussed.

### Western Maryland Issues History

The Western Maryland has issued a revised edition of its "History of the Western Maryland Railway" originally published in 1938. The 128-page volume, written by Edward M. Killough, valuation engineer, contains brief histories of the Western Maryland and each of its constituent parts, including the famous "tapeworm" railroad originally built by the state of Pennsylvania, and a series of short biographies of each of the 29 presidents which the road has had since its opening in 1853. More detailed dates are placed in the rear of the book in special appendices and a large map shows very clearly the location of original corporations and dates of construction of the various parts of the line.

### General Fleming Discusses Wage Philosophy

Some of the basic reasoning which motivated General Philip B. Fleming, Wage and Hour Administrator, in reaching his decision to promulgate a 36 and 33-cent minimum hourly wage for the railroad industry is revealed in his findings and opinion which have just been made public. The opinion and findings, a 68-page document, incorporates the final wage order which goes into effect on March 1, details of which were given in last week's issue.

"I have concluded," writes General Fleming, "that in so far as financial and economic conditions in the industry are relevant, both give every sign of improvement. With respect to the wage increase, almost every road, as to which there is evidence of record, either has shown income available to meet the new demands; or, being relieved of many of its fixed charges, can meet the increase out of operating income; or faces, or is in the process of corporate reorganization, so that its present debt ratio is hardly a fair basis for determining its ability to raise its minimum pay. Such few railroads as actually show some basis for argument that they may be forced to discontinue operations if their costs of operation are increased are admittedly in narrow straits, but in straits so narrow that should they abandon their lines it could hardly be said to be a proximate result of this wage increase. I do not believe, however, that any railroad will discontinue service as a direct or indirect result of the 36 cent minimum wage."

Moreover, it is General Fleming's view

that the railroad industry at large is operating so close to its safe and economic minimum of employees that discharges or furloughs cannot result from a six-cent change in the minimum wage. Also, he feels that it is no more probable that any substantial reduction in the number of employees in service will follow the abandonment of uneconomic railway mileage.

"As to the one alternative method of employment curtailment," concludes General Fleming, "it has been my opinion that in the great majority of cases railroad policy-makers either will find it unwise to mechanize merely to meet the wage increase, or as alert managers will have intended to take every advantage of the economies available from industrial rationalization anyway. Since curtailment of employment will not be great as a result of the order herein made, the only effect will be, as forecast by the Committee (Railroad Industry Committee), that 'the respective amounts going to railway ownership and railway labor, for their participation in owning, operating and maintaining the American Railroad System, will suffer a change, the amount going to railway labor slightly increasing, and the amount going to the other interests slightly decreasing.'"

### Congress Gets Pipe-Line Bills

Similar bills to amend the Interstate Commerce Act to require pipe lines to obtain certificates of convenience and necessity from the Interstate Commerce Commission for new construction or extensions have been introduced in the Senate and House, respectively, by Senator Schwartz of Wyoming and Representative Crosser of Ohio, Democrats. The Schwartz bill (S. 947) differs from the Crosser bill (H. R. 3513) in that it has an additional proviso stipulating that it shall not apply "to pipe lines not engaged in interstate commerce, or to pipe lines used solely for the transportation of crude oil in gathering lines in the field and thence to interstate pipe lines or other forms of interstate transportation." Also, the Senate measure would require a certificate for the acquisition of a pipe line as well as for the aforementioned new construction or extension.

### Hearings on N. Y. C. Passenger Service Close

The New York State Public Service Commission held the third and final hearing on February 20 in its investigation of intrastate passenger service of the New York Central which it had ordered on January 9. In terminating the hearings, Chairman M. R. Maltbie announced that the investigation would be kept open pending future developments but that no order against the railroad would be issued in view of promised remedial action. Alleged deficiencies of service brought up at the hearings covered everything from lack of porter service for late Pullman sleepers to delays at ticket windows. Principal complaints were of late trains and dirty cars. Concerning the latter, officers of the road declared that car cleaning forces have been materially increased and additional car cleaning units established at suburban



terminal points. New vacuum cleaning equipment has also been ordered.

Tardiness of trains was attributed primarily to delays by station work and congestion on approach tracks to important terminals. It was proposed that the former be remedied by reduction in local head-end business on through trains and the latter by changes in scheduling to eliminate simultaneous departure and arrival times of a number of trains. At previous hearings officers of the road made it clear that their passenger business has been a declining one, in spite of which service improvements, such as air-conditioning, have been stepped-up. Passenger revenues on the road fell from a peak of \$137,869,000 in 1926 to a low of \$53,000,000 in 1933. Average passenger revenues for the years 1932 to 1939 have been about \$60,000,000 annually. It was stated that the road sustained a loss on its entire passenger service of \$11,724,000 in 1939.

### Water Carriers and the Long and Short Haul Clause

Common carriers by water have six months from the effective date of the Transportation Act of 1940's water-carrier-rate provisions (now March 1) to bring their rates into conformity with that other provision which makes them subject to the long-and-short-haul clause of the Interstate Commerce Act's Part I. Such is the advice contained in a recent notice wherein the commission's Division 2 answered the question as to whether the six months period was to be calculated in the foregoing manner or from September 18, 1940, the date of the law's enactment.

The act provided that the water-carrier-rate provisions should become effective January 1, 1941, but the commission has exercised its power to postpone them until March 1.

### Freight Car Loading

Loading of revenue freight for the week ended February 22, which included the Washington's-birthday holiday, totaled 678,493 cars, the Association of American Railroads announced on February 27. This

was a decrease of 42,683 cars, or 5.9 per cent, below the preceding week, but an increase of 83,110 cars, or 14 per cent, above the corresponding week last year and an increase of 121,751 cars, or 21.9 per cent, above the comparable 1939 week.

As reported in last week's issue, the loadings for the previous week ended February 15, totaled 721,176 cars, and the summary for that week, as compiled by the Car Service Division, A. A. R., follows:

| Revenue Freight Car Loading    |                             |           |           |
|--------------------------------|-----------------------------|-----------|-----------|
| For Week Ended                 | Saturday, February 15, 1941 | 1940      | 1939      |
| Districts                      | 1941                        | 1940      | 1939      |
| Eastern .....                  | 163,270                     | 130,621   | 128,131   |
| Allegheny .....                | 161,880                     | 123,700   | 113,197   |
| Pocahontas .....               | 50,478                      | 45,801    | 40,117    |
| Southern .....                 | 112,013                     | 97,937    | 91,683    |
| Northwestern ..                | 80,318                      | 71,968    | 68,427    |
| Central Western ..             | 101,323                     | 92,801    | 91,374    |
| Southwestern ..                | 51,894                      | 45,409    | 43,716    |
| Total Western Districts ....   | 233,535                     | 210,178   | 203,517   |
| Total All Roads                | 721,176                     | 608,237   | 576,645   |
| Commodities                    |                             |           |           |
| Grain and grain products ....  | 29,297                      | 30,897    | 28,582    |
| Live stock ....                | 10,720                      | 11,083    | 11,120    |
| Coal .....                     | 152,908                     | 132,405   | 125,978   |
| Coke .....                     | 14,239                      | 10,005    | 7,656     |
| Forest products ..             | 39,328                      | 30,532    | 24,403    |
| Ore .....                      | 13,478                      | 9,821     | 8,944     |
| Merchandise l.c.l..            | 153,049                     | 142,987   | 148,244   |
| Miscellaneous ....             | 308,157                     | 240,507   | 221,718   |
| Feb. 15 .....                  | 721,176                     | 608,237   | 576,645   |
| Feb. 8 .....                   | 710,196                     | 627,429   | 576,352   |
| Feb. 1 .....                   | 714,323                     | 657,830   | 573,127   |
| Jan. 25 .....                  | 710,752                     | 650,187   | 590,459   |
| Jan. 18 .....                  | 703,497                     | 646,382   | 586,656   |
| Cumulative Total, 7 Weeks .... | 4,885,790                   | 4,451,231 | 4,014,854 |

### Forwarder-Truck Joint Rates Must Go March 16

After making the February 27th announcement, noted below, of its refusal to postpone beyond February 28th the effective date of its outstanding orders which require the discontinuance of joint-rate arrangement by forwarders and motor carriers, the Interstate Commerce Commission the same date announced that after consideration of new petitions it has postponed the effective date

until March 16th in order that any readjustment required may be made with the least possible disruption of the industry and the least inconvenience to the shipper.

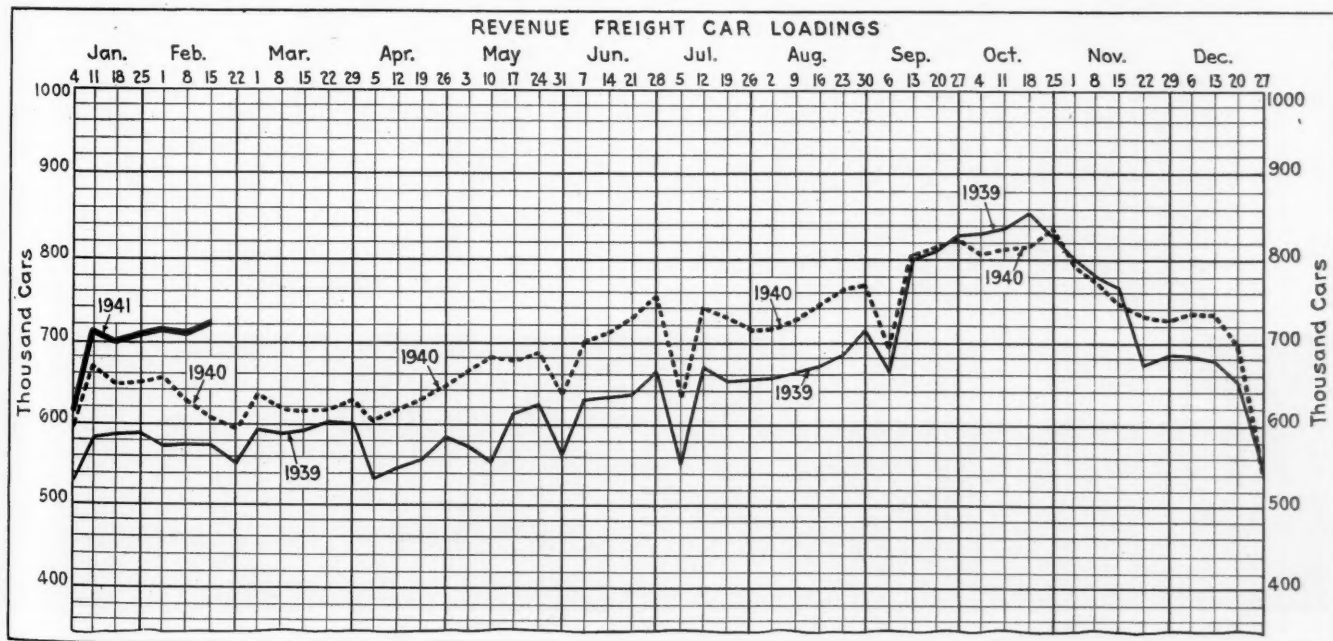
The Interstate Commerce Commission, on February 27, announced that it had denied petitions for a further postponement beyond February 28 of the effective date of its outstanding orders which require the discontinuance of joint-rate arrangements between forwarders and motor carriers. The Commission's action was revealed one day after the House Committee on Interstate and Foreign Commerce had authorized Chairman Lea to address to I. C. C. Chairman Eastman a letter requesting a further postponement to and not beyond September 1; however, when it announced the latest postponement from December 11 to February 28 the Commission had warned interested parties not to rely upon any further extensions.

The aforementioned action of the House Committee came at a meeting called to consider House Joint Resolution 118 introduced recently by Chairman Lea to direct the Commission to postpone the effective date of the orders until March 1, 1942. The committee did not vote to report the resolution to the House, but instead authorized Mr. Lea to write Chairman Eastman. Meanwhile Senator Truman, Democrat of Missouri, has introduced Senate Joint Resolution 46, which is identical with H. J. Res. 118.

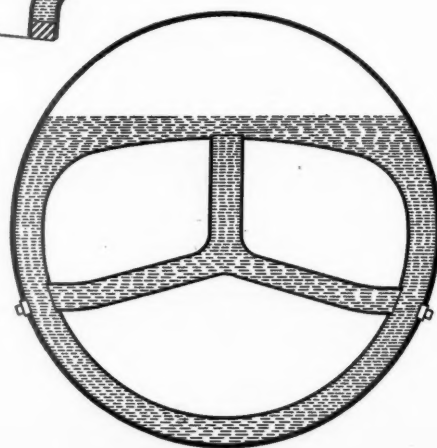
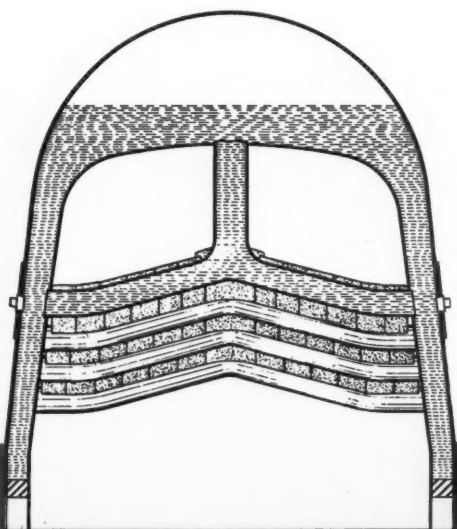
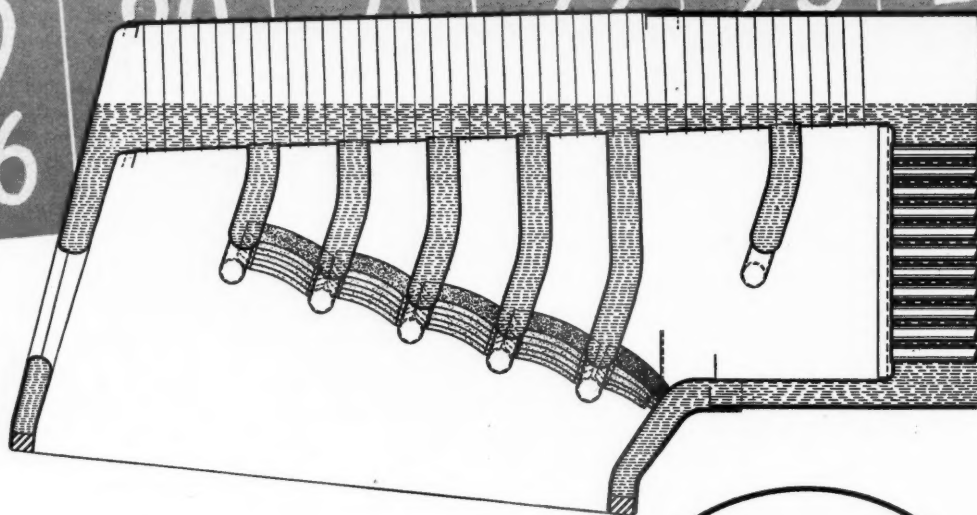
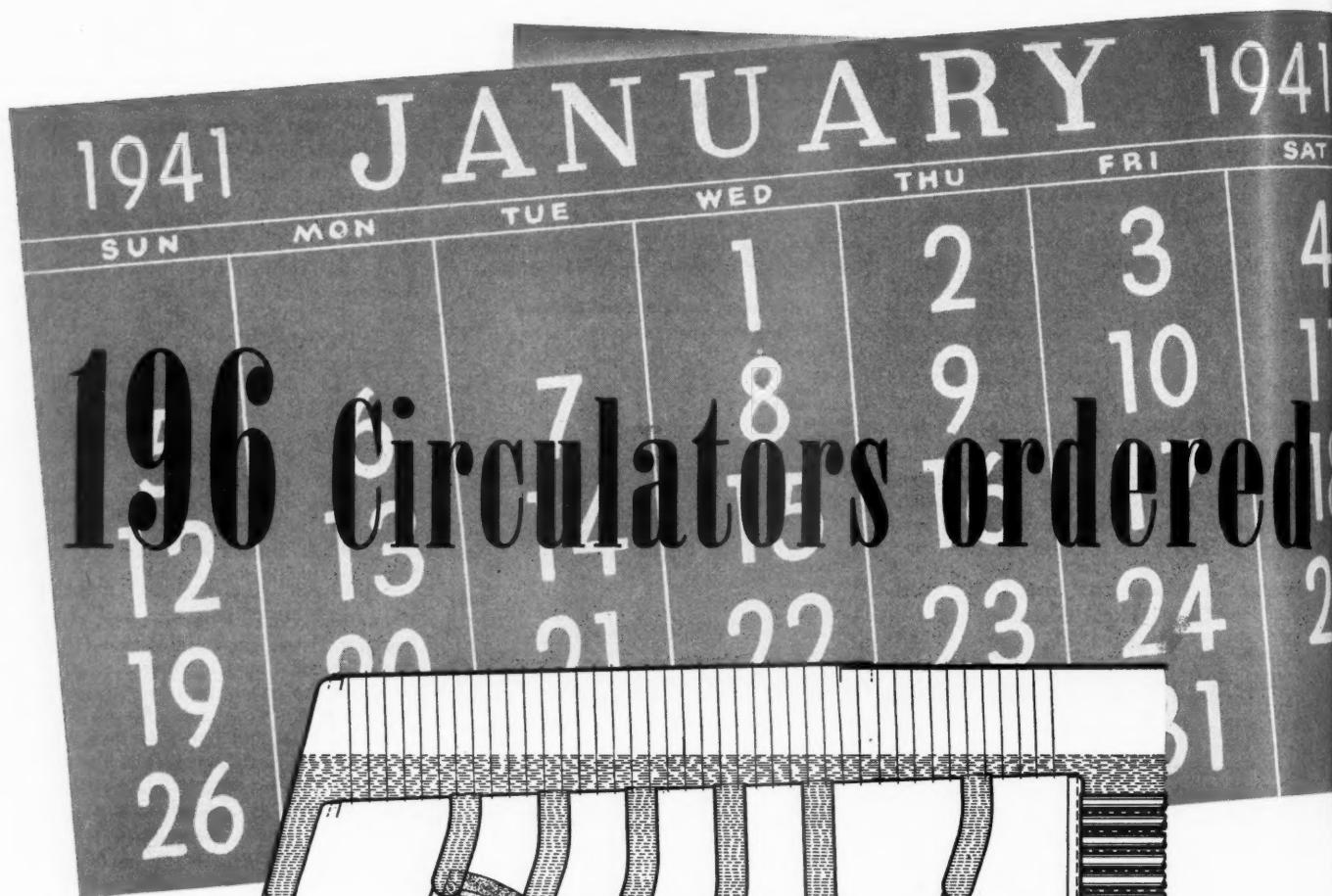
### B. A. E. Making Several Transport Studies

The annual report of the Bureau of Agricultural Economics of the U. S. Department of Agriculture reveals that this group is currently making a study of what effect that Hoch-Smith resolution has had on rates on agricultural products and other commodities.

"When the study is completed," states the report, "it is expected that constructive criticism and evaluation will be made of the Congressional-mandate method of securing commission action with respect to





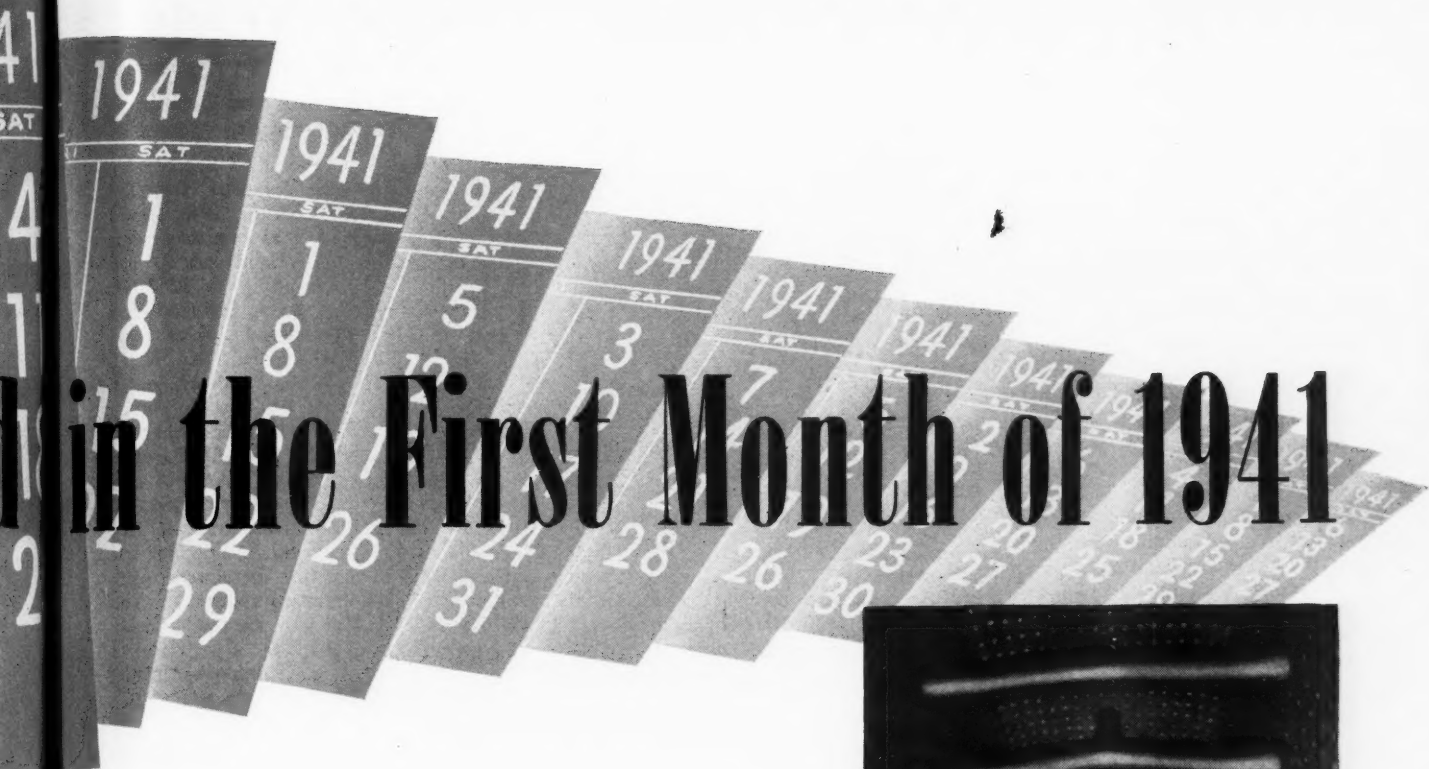


**AMERICAN**

NEW YORK

CHICAGO



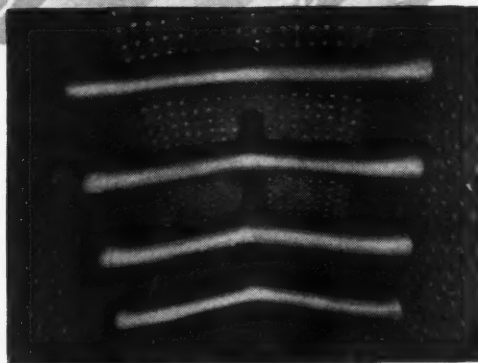


# in the First Month of 1941

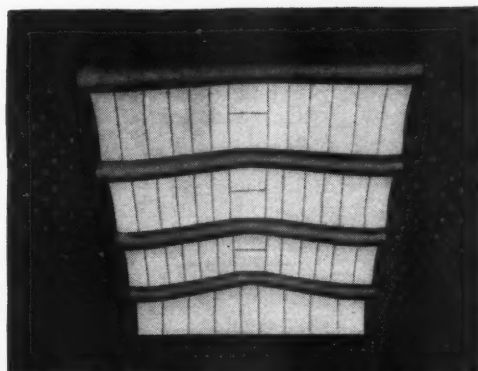
In the month of January, alone, the American Arch Company received orders for 196 Security Circulators to be installed on 30 locomotives. This is graphic evidence of railroad approval of The Security Circulator.

The performance record of the 660 units that have been installed during the last six years is responsible for the trend towards Security Circulators.

As the Security Circulator is adaptable to any type of locomotive you can improve the efficiency and decrease the maintenance of your old, as well as your new, locomotives.



View illustrating the positioning of Security Circulators in an average size of locomotive firebox prior to installing the brick arch.



Typical Security Circulator and brick Arch Installation in a locomotive firebox. The small sectional brick are as readily applied as in an ordinary arch tube firebox.

## ARCH COMPANY, INC.

*Security Circulator Division*



rates on agricultural products and of the value of service principle in rate making. Recommendations for future policies with reference to transportation rates on agricultural products will be developed."

The bureau has recently completed freight-rate indices on shipments of perishables. These index numbers, it is pointed out, relate to shipments of fresh fruits and vegetables in the United States for the period 1913-1939. They are computed to two base periods, 1913 and 1924-1929, and are made up of five groupings of commodities, citrus fruits, apples, other deciduous fruits, potatoes, and other truck crops.

The report of this study, says the bureau, will not only consider the trend in freight rates on perishable farm products, but will also compare the trend in these rates with the trend of nonagricultural commodities. Comparisons will likewise be made, it is said, of the trend in freight rates and the trend in prices of the commodities, and will explain the methods of estimating and weighing utilized in the calculation of the freight-rate index, so that technicians and others will be able to make a more accurate interpretation of these indices.

The bureau also undertook during the year a study of the regulation of motor carrier rates by the commission to "ascertain the directions of policy of the commission with respect to control of motor freight rates and to trace out analytically the principal economic implications for agriculture of policies established during the early years of regulation." This, the bureau considers a pioneering study.

### St. Lawrence Project Would Harm Railroad Employees

Predicting that "the time is not distant when Congress will be asked to consider a resolution authorizing the construction of the St. Lawrence seaway project," Representative Van Zandt, Republican of Pennsylvania, asserted in a recent statement that there is not room for both the railroads and the waterway. Mr. Van Zandt's statement was an extension-of-remarks which he inserted in the February 19 issue of the Congressional Record; and he included also a letter which he had received from J. G. Luhrsens, executive secretary of the Railway Labor Executives' Association.

"Daily," Mr. Van Zandt said, "the picture becomes more pronounced as frantic efforts continue to label the St. Lawrence seaway project as an arm of our national defense." He urged every member of Congress to keep in mind the "effect upon the jobs of railroad men in the United States." In the latter connection, the Pennsylvanian set out a table which showed the number of railway employees by states. Offering Mr. Luhrsens's letter, he appraised it as the best illustration of how "railroad labor as a whole" is opposing the project.

As Mr. Luhrsens put it, railway labor "cannot conceive of any good reason as to the necessity of this seaway project since it cannot possibly aid this nation either in peace or in war, but to the contrary will impose unnecessary financial burdens on the taxpayers. . . . Our nation needs planes, ships, guns, and ammunition and other materials for defense right now more than

the St. Lawrence waterway project as contemplated, since even if it is promoted it cannot possibly be placed in successful operation before eight or ten years have elapsed."

In the same issue of the Record, Representative Wasielewski, Democrat of Wisconsin, inserted a Milwaukee-Journal editorial to make his point that the "press of Wisconsin is almost a hundred per cent for the proposed Great Lakes-St. Lawrence seaway." In the February 25 issue, Representative Beiter, Democrat of New York, inserted what he called "An Adequate Answer to a Seaway Proponent"; it was a letter which Frank J. Caffery, New York assemblyman, sent recently to E. B. Crosby of Massena, N. Y., a director of the National Seaway Council.

### Australian Shippers Get Discount Based on Distance from R. R.

An unusual scheme to fight highway competition was placed in effect during 1940 by the state-owned Commonwealth Railways of Australia. In order to neutralize the disadvantages suffered by shippers of wool located at a distance from railroad stations, the railroad, at the commencement of the wool season, entered into a separate agreement with each "pastoralist" whereby special reduced railroad freight rates to Port Augusta, a point of export, are granted on wool from each holding.

Discounts on freight rates are quoted in zones correlated to the distance by which the shipper's headquarters are removed from the nearest railroad loading point. The advantage of reduced rates accrues directly to the pastoralists, the producer who has the longest highway haul to the railroad receiving the greatest concession. *In return for these reductions each pastoralist agrees that all incoming merchandise and goods required for his business and all outgoing wool, skins, and other products of every description produced on his property must be carried solely by railroad from the nearest station.*

The annual report of the Commonwealth Railways Commissioner for the year ended June 30, 1940, declares that the new arrangement "is working satisfactorily." Separate agreements of this type are permitted by Section 30A of the Commonwealth Railways Act.

### B. & O. to Run Soybean Special

The Baltimore & Ohio dispatched a special train of six cars out of Baltimore, Md., on February 24 for a tour of Ohio, Indiana and Illinois, lasting until April 2 to promote interest in soybean production. The train, which will be operated in conjunction with Ohio, Purdue and Illinois Universities, is in charge of O. K. Quivey, manager of agricultural development. The program calls for 50 stops in as many cities and towns and will offer a well-rounded educational course to those interested in the raising, marketing and processing of soybeans. Lectures will be given daily by experts of the three Universities, comprehensive displays will be shown, and a soybean cooking school will instruct housewives in the use of this growing food product.

## Supply Trade

### Safety Car Heating and Lighting Annual Report

The annual report of the Safety Car Heating and Lighting Company, Inc., for the year ended December 31, 1940, shows a net profit of \$285,519 as compared with \$341,535 in 1939. Dividends of \$3 per share were paid, amounting to \$282,054, as compared with a \$3.50 dividend disbursed in 1939. The earned surplus as of December 31, 1940 was \$1,115,188. W. L. Conwell, president of the company, stated that the last quarter of 1940 was encouraging businesswise and that the company, therefore, had a backlog of unfilled orders at the beginning of 1941 in excess of that at the beginning of 1940. He reported that since the first of the year the company had been fortunate in securing considerable additional business and that there were many inquiries for the company's devices. The drawbacks, however, are increasing delay in securing materials and a scarcity of skilled labor such as is required in the manufacture of the company's products.

### Baldwin Locomotive Annual Report

The Baldwin Locomotive Works and subsidiaries, including the Midvale Company, reported a consolidated net profit of \$1,944,073 in 1940, as compared with \$542,027 in 1939. After deducting preferred stock dividends of \$142,679, the remainder, \$1,801,394, was equivalent to \$1.75 per share of common stock. Baldwin's share in the earnings of Midvale amounted to \$1,984,750 in 1940, compared with \$1,047,942 in 1939. Net profit as stated above includes \$144,181 of non-recurring income. Provision for income and other taxes equaled \$3.58 per share of Baldwin Common Stock, after excluding the proportion of such taxes corresponding to the minority equity in the Midvale Company. Significant comparisons of consolidated operating results follow:

|  | 1940         | 1939         |
|--|--------------|--------------|
| Sales .....  | \$51,102,729 | \$31,463,045 |
| Cost of sales <sup>a</sup> .....   | 43,246,859   | 28,199,537   |
| Operating profit .....   | 7,855,870    | 3,263,508    |
| Other income .....   | 349,776      | 241,219      |
| Other expenses <sup>b</sup> .....  | 1,120,550    | 1,029,689    |
| Provision for Federal and Pa. income taxes   | 3,896,437    | 1,277,824    |
| Profit for year .....  | 3,188,659    | 1,197,214    |
| Equity of Minority Stockholders in net profit of the Midvale Co. and Whitcomb Loco. Co. .... | 1,244,586    | 655,187      |
| Net Profit to Baldwin  | 1,944,073    | 542,027      |

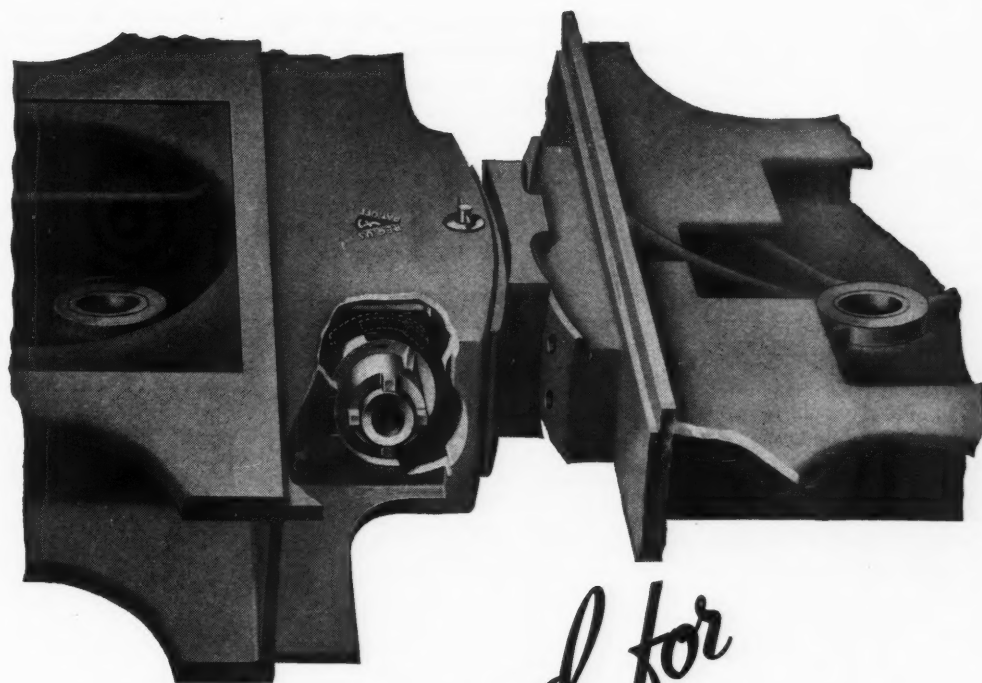
<sup>a</sup> Including depreciation as follows: 1940—\$1,849,002; 1939—\$1,849,214.  
<sup>b</sup> Including interest as follows: 1940—\$461,807; 1939—\$538,237.

Sales of locomotive products included in the consolidated sales listed above totaled \$14,565,851 in 1940 and \$11,363,200 in 1939.

Consolidated net current assets amounted to \$17,125,293 on December 31, 1940, of which Midvale accounted for \$9,008,796. As of January 1, 1940, the corresponding totals were \$13,211,324 and \$7,194,466. The balance of the company's first mortgage 5 per cent sinking fund gold bonds, outstanding in the amount of \$2-

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*“Engineered for  
Easy riding”*

The Type E-2 Radial Buffer makes a safer, easier riding locomotive. » » » Its spherical and cylindrical faces permit movement in any direction, while its predetermined frictional resistance dampens oscillation between engine and tender, prevents lost motion and subsequent destructive shocks to drawbar and pins. » » » Its twin, the Franklin Automatic Compensator and Snubber, takes the job of maintaining proper driving box adjustment that further improves smoothness of operation and extends locomotive mileage and reduces maintenance costs. It is particularly essential on roller bearing boxes.



**FRANKLIN RAILWAY SUPPLY COMPANY, INC.**

NEW YORK

CHICAGO

MONTREAL



295,000, was paid upon maturity, May 1, 1940. Unfilled orders (including Midvale) at the close of the year, without intercompany eliminations, were \$153,226,484, of which \$10,268,269 represented orders for new locomotives. As of January 1, 1940, unfilled orders were \$44,215,799, of which \$4,641,373 was for new locomotives. The company stated that this extraordinary surge of new business was attributable chiefly to participation in the national defense program and that many of these orders will be completed and shipped only over a considerable period of time; for this reason a comparison of the present backlog with backlogs of previous years might be misleading as to the expected volume of near term shipments.

In the report, Charles E. Brinley, president, called attention to the fact that while the number of steam locomotive orders received in 1940 were far below shop requirements for a satisfactory and economical line production, nevertheless, as the year advanced and as heavier traffic and the need for railroad preparedness became more evident, orders for steam locomotive power began to be forthcoming. At the end of the year Baldwin had orders on its books for 59 new steam locomotives (44 domestic and 15 export). Mr. Brinley stated that important advances had been made in the design and distribution of the Company's new Diesel-electric switching locomotives and that plans are underway for the construction of a Diesel-electric passenger and freight locomotive. A total of 26 Diesel-electric switching locomotives were shipped to customers with orders taken somewhat in excess of that figure. The invoice value of Diesel-electric switchers shipped during the 12 months was approximately \$1,900,000.

**The Ardco Manufacturing Company** has moved from its plant in Jersey City, N. J., into larger quarters at 1116 Paterson Plank Road, North Bergen, N. J.

**E. Emery** has been appointed eastern district sales manager for the **Grip Nut Company** with headquarters in Pittsburgh, Pa.

**F. H. Lindus**, branch manager in charge of the service-sales division of the **Timken Roller Bearing Company**, with headquarters at Los Angeles, Cal., has been transferred to Canton, Ohio, where he is engaged in general sales promotional work.

**The Independent Pneumatic Tool Company**, Chicago, will move its Philadelphia, Pa., branch into its newly constructed building at Seventeenth and Fairmount avenues. The company has also recently completed a \$500,000 plant in Los Angeles, Cal.

**E. H. Weigman**, who was appointed sales manager for the **Grip Nut Company** on January 1, 1941, has now been elected vice-president in charge of sales with headquarters in Chicago. **John D. Ristine** has been appointed assistant to the president, with headquarters at Chicago, and **Erastus Emery**, eastern district sales manager, with headquarters at Pittsburgh, Pa., for the **Grip Nut Company**.

## Equipment and Supplies

### Canadian National Orders 25 Steam Locomotives in U. S.

The Canadian National has ordered twenty-five 4-8-4 type freight locomotives for service in the United States on the Grand Trunk Western lines. The locomotives will be built by the American Locomotive Company at Schenectady, N. Y. Inquiry for this equipment was reported in the *Railway Age* of February 15.

### Chicago, Milwaukee, St. Paul & Pacific to Spend \$7,306,290

The improvement budget of the Chicago, Milwaukee, St. Paul & Pacific provides for the expenditure of \$7,306,290 in 1941. The rail, ballast and bridge program calls for the expenditure of \$2,478,593. Included are the joint construction with the Chicago Rock Island & Pacific of a new line and bridge between Birmingham, Mo., and Kansas City; the laying of 34,000 tons of rails; the construction of a station at Austin, Minn., at an approximate cost of \$47,000, and the enlargement of round-houses at Tacoma, Wash., and Madison, Wis.

A total of \$2,387,500 will be spent for new freight and passenger cars to be built in company shops. Orders have been placed with company shops for the construction of 500 50-ton wood-lined steel box cars, 25 caboose cars, six 100-ton flat cars of which four will have depressed floors and two will have depressed floors and wells, and 20 passenger cars. In addition to the \$7,306,290 program, the Milwaukee is considering the expenditure of \$2,500,000 for the modernization of locomotives and locomotive servicing facilities.

### LOCOMOTIVES

**THE NEW YORK SHIPBUILDING COMPANY** has ordered one 0-4-0 type locomotive from the Vulcan Iron Works.

**THE LONE STAR CEMENT CORPORATION** has ordered two 25-ton Diesel-mechanical locomotives of 180-hp. from the Vulcan Iron Works.

**THE E. I. DUPONT DE NEMOURS COMPANY** has ordered two 65-ton Diesel-electric locomotives of 400-hp. from the Vulcan Iron Works.

**THE UNITED STATES NAVY DEPARTMENT** has ordered six 45-ton Diesel-electric locomotives of 300-hp. from the Vulcan Iron Works.

**THE CHICAGO, BURLINGTON & QUINCY** has ordered five 44-ton Diesel-electric locomotives from the Davenport-Besler Corporation. Inclusion of this equipment in the railroad's budget for 1941 was reported in the *Railway Age* of February 15.

**THE UNITED STATES WAR DEPARTMENT** has on order with the Davenport Besler Corporation a total of 22 locomotives, comprising five 35-ton Diesel-electric locomotives, two 30-ton Diesel-mechanical loco-

motives and fifteen 20-ton gasoline-mechanical locomotives.

**THE ATCHISON TOPEKA & SANTA FE** has ordered two 5,400-hp. freight and one 2,000-hp. passenger Diesel-electric locomotives from the Electro-Motive Corporation. With the acquisition of these locomotives the Santa Fe will have a fleet of Diesel-electric locomotives with an aggregate of 105,600 horsepower.

### FREIGHT CARS

**THE UNION PACIFIC** is reported to be contemplating ordering 500 stock cars.

**THE BALTIMORE & OHIO** is inquiring for 100 cabooses.

**THE CHICAGO, ROCK ISLAND & PACIFIC** will purchase 25 70-ton covered hopper bottom gondola cars.

**THE BETHLEHEM STEEL COMPANY** will construct fourteen 100-ton flat cars for use in the company's Johnstown, Pa., plant.

**THE JOHN ROEBLING'S SONS COMPANY** has ordered ten 70-ton steel high-side gondola cars from the American Car & Foundry Co.

**THE ATCHISON, TOPEKA & SANTA FE**, reported in the *Railway Age* of February 1, as inquiring for 10-12 50-ton light weight box cars, has decided not to buy this equipment.

**THE BALTIMORE & OHIO** is reported to have ordered 1,000 gondola cars of 70-tons' capacity; placing 500 with the American Car & Foundry Co., and 500 with the Bethlehem Steel Company.

**THE UNITED STATES NAVY DEPARTMENT**, Bureau of Supplies and Accounts, will receive bids March 11 on six 70-ton steel flat cars with armor plate floor for White Plains, Md.—Schedule 5581.

**THE NEW YORK, NEW HAVEN & HARTFORD** has received court authorization to proceed with the purchase of 1,000 box cars. It is expected that the cars will be built by the Pressed Steel Car Co. Inquiry for this equipment was reported in the *Railway Age* of February 8.

**THE CENTRAL OF NEW JERSEY** has received court authorization to proceed with contracts for 1,000 hopper cars of 50 tons' capacity, 50 cement cars and 50 cabooses. Cost of the equipment is estimated at \$2,670,587. The cars will be built in company's shops at Elizabethport, N. J., and the Reading Company's shops at Reading, Pa.

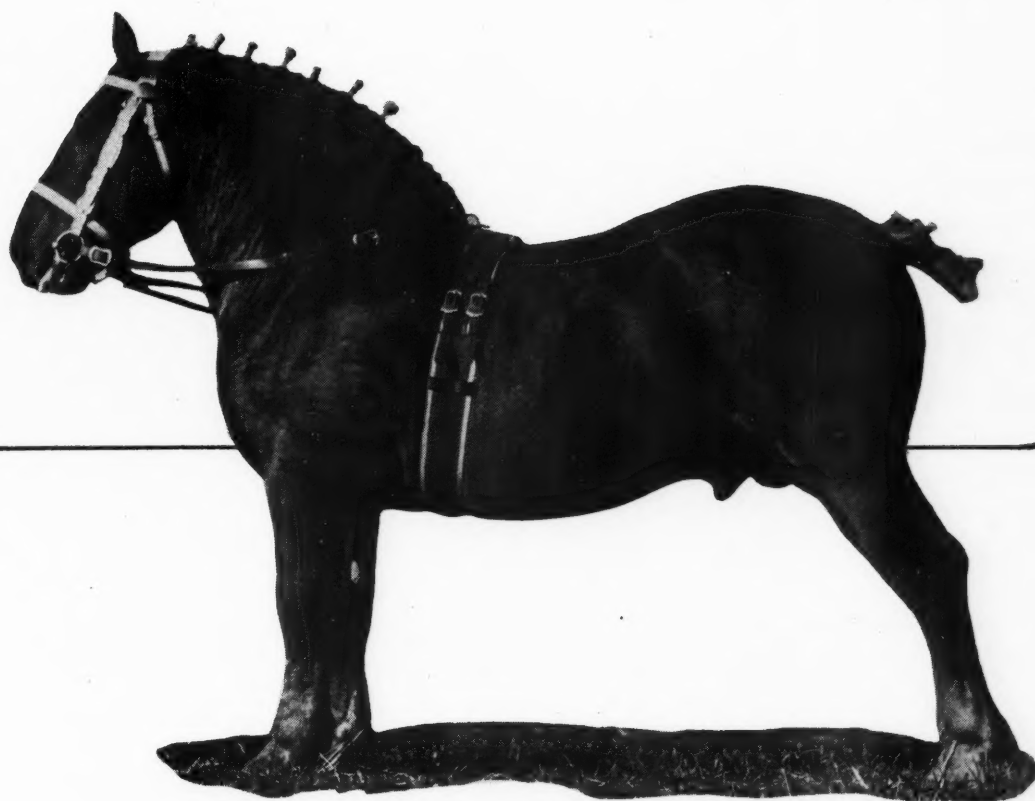
### PASSENGER CARS

**THE CHICAGO & NORTH WESTERN** has placed an order with the Pullman-Standard Car Manufacturing Company for 25 streamlined high tensile steel passenger cars, similar to those used in the "400," including 3 baggage-taproom-lounge cars, 14 coaches, 4 diners and 4 parlor cars. Two coaches, a diner and a parlor car will be used on the Minnesota "400" and the balance of the equipment will be used in

*Continued on next left-hand page*



# H O R S E S



No arguments are needed to convince you that superheaters should be specified . . . superheaters are just as much a part of the steam locomotive as the boiler.

But as locomotives have been improved to meet changed conditions, so also have Elesco superheaters been developed to keep abreast with the demands of modern operation. It is of utmost importance, therefore, that you specify the superheater arrangement which will give the maximum horsepower obtainable within the

limits of the boiler . . . the more "horses" the better.

These requirements are met by the small-tube type superheater, the Elesco type "E". It increases true boiler efficiency, it makes possible increased evaporating surface, and yet it gives the best possible ratio of superheating to boiler evaporating surface . . . which result in 25 per cent increase in the sustained horse-power.

For the modern super steam locomotives, or existing locomotives lacking in boiler horsepower —



SUPERHEATERS • FEEDWATER HEATERS  
AMERICAN THROTTLES • STEAM DRYERS  
EXHAUST STEAM INJECTORS • PYROMETERS

THE  
**SUPERHEATER**  
C O M P A N Y

Representative of  
AMERICAN THROTTLE COMPANY, INC.  
60 East 42nd Street, NEW YORK  
122 S. Michigan Ave. CHICAGO  
Montreal, Canada  
THE SUPERHEATER COMPANY, LTD.



three trains that will serve points on the Shore line, in Wisconsin and in Michigan. The addition of these trains will materially increase the frequency of streamlined train service between Chicago and Milwaukee.

## IRON AND STEEL

THE UNITED STATES BUREAU OF RECLAMATION, Denver, Colo., is receiving bids until March 12, for rail expansion devices, including castings, guard rails, bolts and washers, for the Pit River bridge on the Shasta line diversions of the Southern Pacific, part of the government's Central Valley irrigation project in California. All of the materials will be installed by the government.

## Financial

**BEAVER VALLEY.—Abandonment.**—This company has asked the Interstate Commerce Commission for authority to abandon a line extending from Beaver, Pa., to Bridgewater Junction, 0.8 mile.

**BOSTON & MAINE.—New director.**—Augustus P. Loring, Jr. has been elected a director of this road to succeed the late W. Rodman Peabody.

**CHESAPEAKE & OHIO.—Bonds.**—This company has been authorized by Division 4 of the Interstate Commerce Commission to issue \$24,800,000 of refunding and improvement mortgage bonds, series G-1 to G-25, inclusive, bearing various interest rates and maturity dates, \$6,490,000 to be sold at par and accrued interest, \$7,310,000 to be sold at par and accrued interest less a concession of one-half of one per cent, and the remaining \$11,000,000 to be sold at 98½ and accrued interest; the proceeds, together with treasury cash, to be used to redeem \$29,100,000 of 3½s, due in 1963. Details of the flotation were given in the *Railway Age* of February 8, page 299. The commission's decision points out that the average annual cost of the money will approximate 2.38 per cent.

**DELAWARE, LACKAWANNA & WESTERN.—New director.**—Robert Winthrop has been elected to succeed C. M. Woolley as a director of this road.

**FLORIDA EAST COAST.—Reorganization.**—Federal Judge L. W. Strum of Jacksonville, Fla., has appointed Scott M. Loftin and Edward W. Lane trustees of this road, the appointments being subject to ratification by the Interstate Commerce Commission and to its approval of reorganization of the road under Section 77. The trustees will supplant the former receivers of the line, Mr. Loftin and W. R. Kenan, Jr. (former president of the road), who have operated the line since it was placed in equity receivership in 1931. Mr. Lane is president of the Atlantic National Bank, Jacksonville. Appointment of Mr. Lane was challenged by an independent bondholders' committee on grounds of conflicting interest. It is understood that counsel for this committee recommended the ap-

pointment of R. K. Bradford, assistant general manager, Denver & Rio Grande Western, as one of the trustees.

An unusual reorganization plan for the road has been submitted by counsel representing the estate of the late Alfred I. duPont, former president of the E. I. duPont de Nemours Company and long a resident of Florida, who died in 1935. Under this plan the estate would put \$4,000,000 of new capital into the railroad for which it would receive \$3,000,000 in second mortgage bonds and approximately 51 per cent of the stock of the new company. The principal amount of the present 4½ per cent first mortgage bonds would remain \$12,000,000, but interest would be reduced to 3¾ per cent, subject to increase to 4 per cent when earnings for two successive years reach \$1,250,000. A new general mortgage income bond issue of \$9,000,000 at an interest rate of 4½ per cent would be exchanged for the present issue of first and refunding 5s, 95,000 shares of capital stock with a par value of \$20 per share would be provided, 50,000 shares being purchased by the duPont estate, the remaining 45,000 shares to be made available for purchase at par net by holders of the general mortgage bonds. Unsecured indebtedness and the present capital stock of the company would be eliminated by the plan.

**LOUISVILLE & NASHVILLE.—Abandonment by the Louisville, Henderson & St. Louis.**—The Louisville, Henderson & St. Louis and the Louisville & Nashville, respectively, would be authorized to abandon a line and the operation of a line extending from Irvington, Ky., southwesterly to Fordsville, 37.7 miles, with branches extending from Junction, Ky., to Hardinsburg, 1.7 miles and from Dempster, Ky., to Falls of Rough, 4.5 miles, if Division 4 of the Interstate Commerce Commission adopts a proposed report of its Examiner W. J. Schutrumpf. At the same time Examiner Schutrumpf would also authorize the L. & N. to abandon its so-called Hartford line extending from Ellmitch, Ky., southwesterly to Hartford, 19.2 miles.

**PENNSYLVANIA-NEW YORK CENTRAL-BALTIMORE & OHIO.—Bonds of the Monongahela.**—The Monongahela has been authorized by Division 4 of the Interstate Commerce Commission to issue \$11,418,000 of first mortgage 3¼ per cent bonds, series B, maturing February 1, 1966, the proceeds to be used to redeem prior to maturity a like amount of outstanding first mortgage four per cent bonds, due May 1, 1960. At the same time Division 4 authorized the Pennsylvania, the Pittsburgh & Lake Erie and the Baltimore & Ohio to jointly and severally guarantee the payment of the principal and interest of the bonds. The bonds have been sold at 100.75 to Kuhn, Loeb & Co. and Morgan Stanley & Co. making the average annual cost to the company approximately 3.21 per cent.

## Average Prices of Stocks and Bonds

|   | Feb. 25 | Last week | Last year |
|---|---------|-----------|-----------|
| Average price of 20 representative railway stocks.. | 29.30   | 28.61     | 31.51     |
| Average price of 20 representative railway bonds..  | 62.15   | 61.81     | 58.68     |

## Construction

### N. Y. Public Service Commission 1940 Grade Crossing Report

Increased activity during 1940 in the elimination of hazardous grade crossings in various sections of the State, outside of New York City, is shown in the annual report of the Public Service Commission to Governor Lehman and the legislature. The commission states that during the year 26 projects covering 81 highway-railroad crossings were placed under contract at a total estimated cost of \$14,217,329.

Since the inception of the Grade Crossing Elimination Act in 1926, the commission has instituted 1,238 grade crossing proceedings covering 2,486 crossings. It has adopted 613 orders directing the elimination of 1,107 crossings, of which 816 have been eliminated and the work approved. The estimated cost of eliminations completed under the Grade Crossing Act is said to be \$75,582,887. Elimination projects now under contract will involve expenditures of about \$16,400,000 more. Under the grade crossing amendment to the state constitution in 1938 practically the entire cost of elimination projects is now borne by the State. The share of the railroads in elimination costs has been reduced from 50 per cent to not more than 15 per cent.

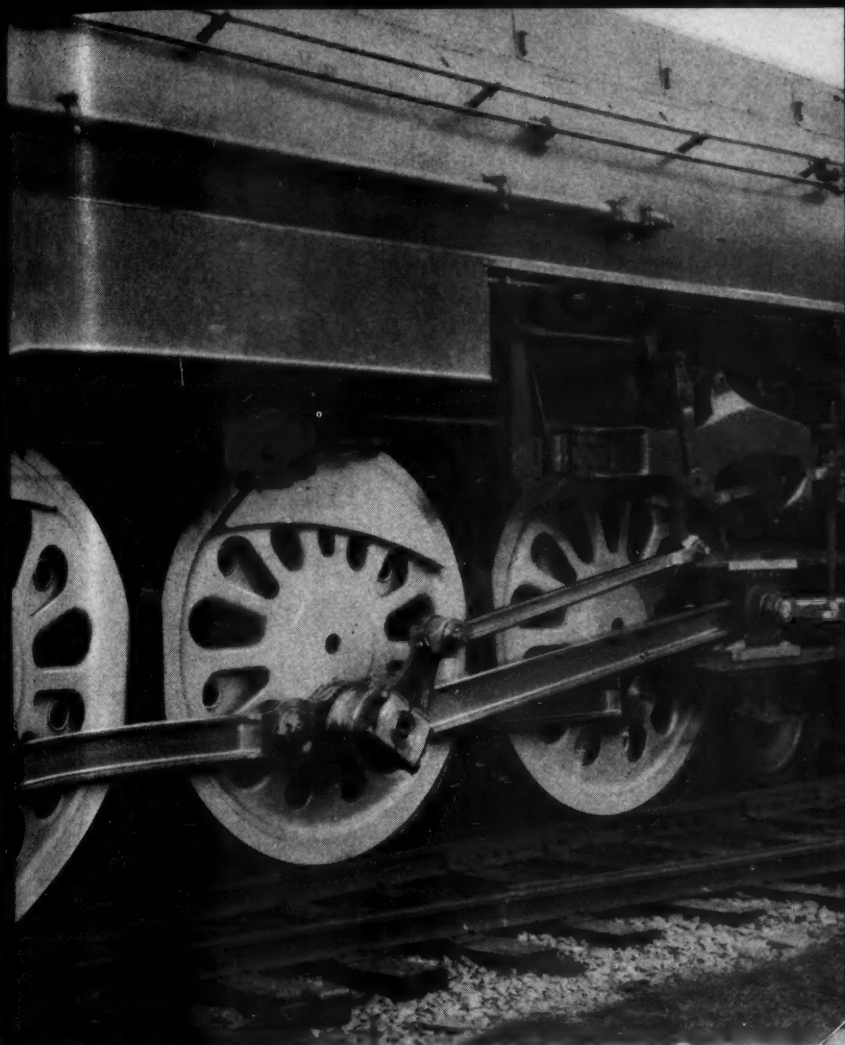
The commission states that the elimination of hundreds of dangerous grade crossings has brought about a marked decline in the number of accidents and fatalities at crossings. In 1929 there were in the state, outside of New York City, where the Transit Commission has jurisdiction, 7,900 highway-railroad crossings. The number of crossing accidents in 1929 were 924 with 192 persons killed and 531 injured. By the end of 1939 the number of crossings had been reduced to 6,722, a decrease of 1,178 danger points, and the number of accidents fell to 358, with 55 killed and 216 injured. In 1940, for the first time in four years, there has been a slight increase in the number of persons killed in grade crossing mishaps. Sixty-eight persons lost their lives during the year.

**CENTRAL OF GEORGIA.**—A contract has been awarded the Ross and White Company, Chicago for the installation of a Red Devil locomotive coaler at Chattanooga, Tenn.

**CHICAGO & NORTH WESTERN.**—A contract amounting to approximately \$144,000 has been awarded the Leninger Construction Company, Chicago, for the removal of an existing grade separation structure under three tracks of the C. & N. W. at Touhy avenue in Park Ridge, Ill., and the construction of a new bridge which will provide greater clearance, both vertically and horizontally, for Touhy avenue. The grade line of the street will be lowered under the new bridge approximately 1.7 ft. The new bridge will be a ballasted deck 3-track through plate girder span 78 ft. long, with 16 ft. 8 in. I-beam spans at each end over the sidewalks. The 78-ft. span will be supported on concrete-encased

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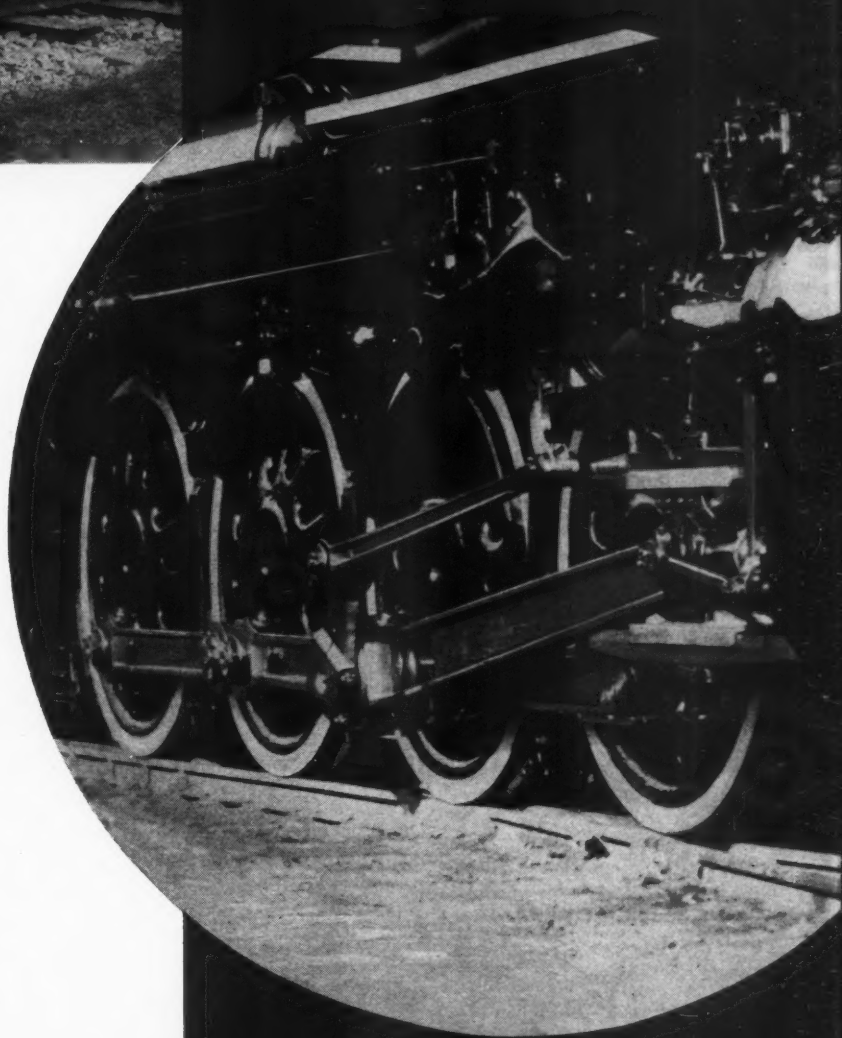


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30 CHURCH STREET . . .





steel bents. The bridge will cross over Touhy avenue at an angle of approximately 39 deg., and will have two concrete sidewalks and a hand railing. Concrete walks and stairways at the four corners will provide access from Touhy avenue to the track level. The new bridge will provide a 46-ft. horizontal clearance and a 14-ft. vertical clearance for Touhy avenue, and two 5-ft. sidewalks at the street level. The contract for the steel was awarded to the American Bridge Company.

**LOUISVILLE & NASHVILLE.**—Contracts have been awarded the Ross and White Company, Chicago, for installation of Red Devil locomotive coalers at Junta, Ga., and West Knoxville, Tenn.

**NEW YORK CENTRAL.**—Contracts for construction work have been awarded as follows: to H. L. Fischer, Inc., New York, for covering over company's tracks in Park Avenue between 96th and 97th Streets, New York; to the Elmhurst Contracting Company, Inc., Elmhurst, N. Y., for construction of a 32nd Street approach to the 11th Avenue viaduct between 10th and 11th Avenues; to the W. F. Babor & Company, Inc., New York, for alterations of buildings numbers 514, 516 and 518 on the south side of West 30th Street.

**THE NEW YORK, NEW HAVEN & HARTFORD** has authorized reconstruction of bridge facilities at Shelton, Conn., at estimated cost of \$50,000, and at Granby, Conn., at estimated cost of \$34,000.

**NORTHERN PACIFIC.**—This company is spending approximately \$193,000 on reconstruction work on Piers 1 and 2 at Seattle, Wash. On Pier 2 the work consists of redriving piling, repairs to the dock and repairs and improvements on the wharf. The work on Pier 1, is of a similar nature and in addition includes the construction of new offices. Company forces were used for a major portion of the work.

**NORTHERN PACIFIC.**—A contract has been awarded the Ross and White Company, Chicago, for the installation of a Red Devil locomotive coaler at Iron-ton, Minn.

**PENNSYLVANIA.**—Contracts have been awarded the Ross and White Company, Chicago, for installation of Red Devil locomotive coalers at Ashtabula, Ohio and Cadillac, Mich.

**SOUTHERN.**—A contract has been awarded the Ross and White Company, Chicago, for the installation of a Red Devil locomotive coaler at Hampton, Fla.

**UNION PACIFIC.**—Division 4 of the Interstate Commerce Commission has dismissed for want of jurisdiction this company's application for authority to construct a spur track extending from Keetley, Utah, to a mine of the New Park Mining Company, 1.8 miles.

**THE UNITED STATES ARMY,** Engineers Office, Los Angeles, Cal., will receive bids March 6 for constructing a spur and appurtenant facilities from the Western Pacific Railroad to the Wendover bombing range, approximately one mile south of Wendover, Utah.

## Railway Officers

### EXECUTIVE

**William Way, Jr.,** has been appointed executive assistant, office of the president, of the Nashville, Chattanooga & St. Louis, with headquarters at Nashville, Tenn. Mr. Way will direct educational activities being undertaken by this railroad.

**S. M. Gossage** has been appointed assistant to the vice-president and general manager of the Canadian Pacific, with headquarters at Toronto, Ont., succeeding **H. W. Greeniaus**, whose appointment as general superintendent of the Ontario district was reported in the *Railway Age* of February 22.

**Anton Anderson**, chief engineer of the Chicago, Indianapolis & Louisville (Monon), has been appointed also assistant chief operating officer, with headquarters as before at Chicago, a newly created position. The position of general manager, which has been vacant since the retirement of **F. E. Lewis**, announced in the *Railway Age* of January 25, has been abolished.

**Harold W. Burtress**, assistant to the trustees and secretary of the Chicago Great Western, with headquarters at Chicago, has been elected vice-president-transportation, following the reorganization of the company. Mr. Burtress was born in Chicago on November 16, 1897, and entered railway service in 1914 as a clerk on the



Harold W. Burtress

Chicago, Burlington & Quincy. From 1915 to 1922 he was employed by the Star Union Line and the Pennsylvania and in the latter year was appointed secretary to the president of the Chicago Great Western. From 1925 to 1930, he also served as secretary to the chairman of the board of this railroad and to the chairman of the Western Association of Railway Executives. In 1933 he was promoted to assistant to the president and secretary of the Great Western, and on June 15, 1934, was also placed in charge of the transportation division and was elected vice-president of

six subsidiary companies and president of the Great Western Coal Company.

### FINANCIAL, LEGAL AND ACCOUNTING

**Robert E. Connolly**, treasurer of the Illinois Central, has been elected a vice-president in charge of the accounting, treasury and secretarial departments. Mr. Connolly was born in New York and



Robert E. Connolly

entered the employ of the Illinois Central as a clerk in its New York office in 1902. He was promoted to assistant treasurer in 1916, to treasurer in 1918 and to secretary and treasurer in 1933. In 1938 he was transferred to Chicago with the removal of the board of directors from New York to Chicago.

**W. B. McKinstry**, controller of the Illinois Central, with headquarters at Chicago, retired on March 1, and the position of controller was abolished.

**G. E. Chessman**, assistant general auditor of the Elgin, Joliet & Eastern, with headquarters at Chicago, has been promoted to general auditor with the same headquarters, succeeding **P. L. Fisher**, retired.

### OPERATING


**O. H. Hummer**, formerly in charge of methods, studies and inspection of traffic work for the Western Electric Company has been appointed assistant general manager of the Manufacturers' Junction Railway, with headquarters at Cicero, Ill.

**E. M. Tolleson**, trainmaster on the Southern, has been promoted to superintendent of the Mobile division, with headquarters at Selma, Ala., replacing **W. W. Simpson**, who has been appointed superintendent of the New Orleans & Northeastern (part of the Southern) with headquarters at Hattiesburg, Miss., succeeding **Z. L. Mobley**, who continues as superintendent at Birmingham, Ala. The jurisdiction of the superintendent of the New Orleans & Northeastern has been extended to include the New Orleans Terminal Company. **A. M. Tipton**, assistant superintendent at Hattiesburg, has been appointed trainmaster at that point, and the position of assistant superintendent has been abolished.



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# *Here's One Way to Prevent* **Costly Train Delays**



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# **WESTINGHOUSE AIR BRAKE CO.**

**WILMERDING, PENNSYLVANIA**



ished. **W. W. Greiner** has been appointed trainmaster at Birmingham, succeeding **D. E. Clark**.

**W. P. Scruggs**, assistant manager of the Car Service Division's Military Transportation Section, retired on March 1 after 47 years of railroad service which began in 1894 with the Florida Central & Peninsular, now part of the Seaboard Air Line. Mr. Scruggs has been stationed in Washington, D. C., since 1917, the greater part of which time he has been assigned to the Quartermaster General's Office in the War Department. He served throughout the World War as military routing representative in Washington for the Southeastern Passenger Association; and from 1929 until last August, when the Military Transportation Section was created, he was manager of the latter's predecessor—the Troop Movement Section.

**Eugene Alexander Hibbett**, whose retirement on February 1 as superintendent of the Atlanta division of the Nashville, Chattanooga & St. Louis, with headquarters at Atlanta, Ga., was announced in the *Railway Age* of February 8, was born near Nashville, Tenn., on September 16, 1868, and attended Peabody Normal College and Draughton's Business College. He entered railway service in August, 1888, as a trainman on the N. C. & St. L. at Nashville and was promoted to conductor in 1895, serving in both freight and passenger service. In 1904 he was appointed a clerk in the superintendent's office, directing the distribution of cars and the handling of trains. In 1909 Mr. Hibbett was promoted to trainmaster at Nashville and on August 1, 1920, he was advanced to assistant superintendent at Atlanta. He was promoted to superintendent at that point on November 1, 1925.

**Fred C. Paulsen**, whose promotion to assistant general manager of the South-Central district of the Union Pacific, with headquarters at Salt Lake City, Utah, was announced in the *Railway Age* of Febru-



Fred C. Paulsen

ary 8, was born at Omaha, Neb., on March 3, 1888, and graduated from Bellvue College. He entered the service of the Union Pacific in May, 1903, as a shop messenger in the mechanical department, later being transferred to the engineering department, where he served as a rodman, instrument-

man, draftsman, assistant engineer, roadmaster at Manhattan, Kan., officer engineer, and division engineer at Cheyenne, Wyo. In 1926, he was promoted to assistant superintendent, with headquarters at Pocatello, Idaho, and in 1936 he was promoted to superintendent, with the same headquarters. Mr. Paulsen was promoted to general superintendent of the South-Central district with headquarters at Salt Lake City in June, 1939, which position he held until his recent promotion.

**William A. Swindell**, whose promotion to superintendent of the Atlanta division of the Nashville, Chattanooga & St. Louis, with headquarters at Atlanta, Ga., was



William A. Swindell

announced in the *Railway Age* of February 8, was born at Greenfield, Tenn., on October 27, 1884, and entered railway service in December, 1903, as a telegraph operator on the N. C. & St. L. In 1912 he was promoted to train dispatcher at Nashville, Tenn., and four years later he was advanced to chief dispatcher of the Chattanooga division. He was promoted to trainmaster at Atlanta in September, 1924, and in September, 1927, he was promoted to assistant superintendent of the P. & M. and the Nashville divisions, with headquarters at Bruceton, Tenn. On January 1, 1941, Mr. Swindell was transferred to the Atlanta division, with headquarters at Atlanta. His promotion to superintendent was effective February 1.

## TRAFFIC

**C. H. Ethridge** has been appointed general agent of the Atlantic Coast Line, with headquarters at Norfolk, Va.

**F. C. Sheldon** has been appointed general agent of the Duluth, South Shore & Atlantic and the Mineral Range, with headquarters at Boston, Mass.

**C. W. Waterman**, commerce agent on the Southern Pacific Lines in Texas and Louisiana, at Houston, Tex., has been promoted to assistant general freight agent at that point.

**William W. Sells**, traveling agent for the Chicago & North Western at Salt Lake City, Utah, has been promoted to general agent at that point succeeding **F. T. Lewis**, who has been transferred to Pittsburgh, Pa. Mr. Lewis replaces **Albert O.**

**Olson**, whose promotion to general freight agent at Chicago was announced in the *Railway Age* of February 8.

**W. E. Rachels** has been promoted to express traffic manager of the Seaboard Air Line, with headquarters at Norfolk, Va., succeeding **W. J. Hock**, who has been appointed assistant general freight agent at Tampa, Fla.

**D. C. McCready**, traffic representative of the Western Pacific, with headquarters at New York, has been promoted to eastern traffic manager in charge of a new traffic office opened in New York on March 1.

**Thomas Fielding**, district freight agent on the Southern Pacific at Los Angeles, Cal., has been appointed also district freight and passenger agent at San Diego, Cal., and traffic manager of the San Diego & Arizona Eastern, succeeding **A. D. Hagaman**, deceased, in the latter position.

**M. W. Martell**, executive rate clerk in the general freight office of the Norfolk Southern at Norfolk, Va., has been promoted to general traffic agent at Chicago, succeeding **J. A. Schroder**, whose appointment as assistant general agent for the Missouri-Illinois, at Chicago, was announced in the *Railway Age* of January 11.

**George D. Sterne**, general freight and passenger agent of the Savannah & Atlanta, has been appointed traffic manager, with headquarters as before at Savannah, Ga. **J. D. Schley** has been appointed general freight agent at Savannah. The position of general freight and passenger agent has been abolished.

## MECHANICAL

**E. O. Rollings**, master mechanic of the South Louisville shops (Louisville, Ky.) of the Louisville & Nashville, has been appointed superintendent of the South Louisville shops, a change of title.

**Grant W. Stanton**, traveling engineer of the Minneapolis, St. Paul & Sault Ste. Marie, has been promoted to master mechanic, with headquarters as before at Minneapolis, Minn., succeeding to the duties of **W. F. Buscher**, general master mechanic, whose death on February 6 is announced elsewhere in these columns.

**C. D. Allen**, assistant master mechanic on the Chesapeake & Ohio at Clifton Forge, Va., has been promoted to master mechanic of the Cincinnati division, with headquarters at Stevens, Ky., succeeding **P. T. Briers**, who has been transferred to the Richmond (Va.) division, effective February 22, to succeed **J. S. Williams**, deceased.

## ENGINEERING AND SIGNALING

**L. T. Nuckols**, engineer of track of the Chesapeake & Ohio, whose appointment as assistant chief engineer, with headquarters as before at Richmond, Va., was reported in the *Railway Age* of February 1, has been in the service of this company for more than 24 years. He was born on December 12, 1890, near Rockville, Va.,

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# HUNT-SPILLER GUN IRON

*Air Furnace*



and after attending the local schools he completed his education at Parkersburg, W. Va. He first entered railway service on July 1, 1907, with the South & Western (now the Clinchfield). Subsequently he entered the service of the Louisville & Nashville, where he engaged on location



L. T. Nuckols

and construction work, advancing from chainman to assisting locating engineer. For 18 months beginning in 1915, Mr. Nuckols served with the Bureau of Valuation of the Interstate Commerce Commission, leaving the commission to enter the service of the C. & O. on October 3, 1916, as resident engineer on construction of the line from Man, W. Va., to Gilbert, subsequently being connected with various other heavy construction projects in West Virginia. On November 20, 1923, Mr. Nuckols was promoted to district engineer at Ashland, Ky., being appointed resident engineer at Huntington, W. Va., on January 1, 1932. On October 6 of the latter year he was appointed assistant division engineer at Ashland, being promoted to division engineer at the same point on June 1, 1936. He was appointed engineer of track on June 1, 1939, which position he was holding at the time of his recent appointment as assistant chief engineer, effective January 18.

**D. F. Apple**, assistant division engineer on the Chesapeake & Ohio, has been appointed acting division engineer, effective February 16, with headquarters as before at Covington, Ky., in place of **T. S. Pattison**, who has been called for military service.

**H. L. Roblin**, roadmaster on the Canadian National at Regina, Sask., has been promoted to division engineer at that point succeeding **P. C. Perry**, who has been transferred to Port Arthur, Ont. Mr. Perry replaces **E. W. Robinson**, whose appointment as assistant engineer on the Western region, with headquarters at Winnipeg, Man., was announced in the *Railway Age* of February 8.

**A. E. Stewart**, roadmaster on the Canadian Pacific at Cranbrook, B. C., has been promoted to division engineer, with headquarters at Nelson, B. C., succeeding **G. B. Alexander**, who has been trans-

ferred to Vancouver, B. C. Mr. Alexander replaces **Thomas Ernest Price**, whose promotion to district engineer of the Manitoba district, with headquarters at Winnipeg, Man., was announced in the *Railway Age* of January 11.

**F. R. Micheal**, supervisor of bridges and buildings on the Wabash at Montpelier, Ohio, has been promoted to division engineer of the Moberly division, with headquarters at Moberly, Mo., succeeding **S. N. Crowe**, who has been assigned to other duties.

**B. M. Durland**, assistant signal supervisor on the Denver & Rio Grande Western at Grand Junction, Colo., has been promoted to signal construction engineer, with headquarters at Denver, Colo., and **B. C. Eaton**, signal maintainer, has been advanced to assistant signal supervisor at Grand Junction, relieving Mr. Durland.

## OBITUARY

**Frank Walters**, who retired in December, 1934, as a vice-president of the Chicago & North Western, died in Glendale, Cal., on February 25.

**Daniel M. Wootton**, manager of the vacation travel service bureau of the Chicago, Rock Island & Pacific, with headquarters at Chicago, died suddenly of a heart attack on February 20.

**Charles W. Myers**, real estate agent for the Pennsylvania and the Long Island with headquarters at New York, died from a heart attack at his home in Manhasset, Long Island, on February 23, at the age of 56. Mr. Myers was born in 1885 at Camden, N. J., where he attended the public schools. He entered the service of the real estate department of the Pennsylvania in 1901, at the age of 16 years, working in the Philadelphia, Pa., office until 1924, when he was transferred to New York. From 1932 to 1934 he served in the Chicago office, prior to his appointment as real estate agent of the New York Zone of the Pennsylvania and the Long Island, the positions he held until his death.

**W. F. Buscher**, general master mechanic of the Minneapolis, St. Paul & Sault Ste. Marie, with headquarters at Minneapolis, Minn., died suddenly of a heart attack on February 6, at Minneapolis. Mr. Buscher was born at Green Bay, Wis., on June 15, 1880, and entered railway service on the Chicago, Milwaukee, St. Paul & Pacific as a machinist apprentice at Green Bay, later becoming a machinist. On December 26, 1906, he went with the Soo Line as a roundhouse foreman at Enderlin, N. D., and later served in that capacity at Harvey, N. D., Glenwood, Minn., and Superior, Wis. Mr. Buscher was promoted to assistant master mechanic at Wishek, N. D., on December 1, 1915, to master mechanic at Superior on May 1, 1918, and to general master mechanic, with headquarters at Minneapolis, Minn., on June 1, 1926.

**J. H. Gimpel**, assistant superintendent, car department, of the Wabash, with headquarters at Decatur, Ill., died on February

13. Mr. Gimpel was born on August 12, 1875, and entered railway service in 1891 as an apprentice on the Missouri Pacific. From 1899 to 1918 he was employed by the Mexican Central as general car foreman, and by the National Railways of Mexico, the Missouri Pacific, the Vera Cruz & Pacific, the St. Louis San Francisco and the Denver & Rio Grande Western as master car builder. During the World War he served the United States Railroad Administration as supervisor of car repairs for the Western region of the United States. In 1920 he became superintendent of shops of the Grand Trunk at Port Huron, Mich., and in 1922 entered the employ of the Wabash as assistant superintendent, car department, at Decatur.

**George McClellan Thornton**, former treasurer of the Southern Pacific at New York, died on February 25 at his home in East Orange, N. J., at the age of 77. Mr. Thornton retired ten years ago.

**Robert C. Falconer**, assistant vice-president, engineering, of the Erie, with headquarters at Cleveland, Ohio, died on February 20. Mr. Falconer was born at St. Mary's, Pa., on March 21, 1874, and graduated from the University of Wisconsin in 1895. He entered railway service in December, 1898, and until May, 1901, served consecutively as transitman and resident engineer on the Pennsylvania Lines west of Pittsburgh. In October, 1905, he became an assistant engineer in the construction department of the Erie and in October, 1911, he was promoted to division engineer of the New York division, which position he held until October, 1912, when he was advanced to principal assistant engineer. From February, 1913, until January, 1916, he served as superintendent of construction, and on the latter date was appointed assistant chief engineer. In July, 1918, Mr. Falconer was promoted to assistant to the president and chief engineer, with headquarters at New York, and in February, 1927, he was ap-



Robert C. Falconer

pointed engineering assistant vice-president. In July, 1928, he was appointed assistant vice-president and chief engineer, and in June, 1929, he was appointed assistant vice-president in charge of engineering, with headquarters at New York. His headquarters were later changed to Cleveland.